

DECISION LINE

Vol. 41, No. 5

October 2010

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Regionally Elected Vice Presidents—TBD

See **BALLOTS**, page 53

PRESIDENT'S LETTER



Transition and Transformation

by G. Keong Leong, President, DSI

Our Institute first ventured beyond U.S. borders when it held its 1984 annual meeting in Toronto, Canada. Nevertheless, the early traces of the globalization of the Institute can be traced to the first international DSI meeting in Brussels, Belgium, in 1991. Since then we have held an international meeting every other year in the summer. Recognizing that we need to reach out to more members outside the U.S., the Institute took the first big step by starting the Asia Pacific region in the mid-1990s. So it was fitting that this summer I attended the 15th meeting of the Asia Pacific Region in Hong Kong. This meeting was held in conjunction with the International

See **PRESIDENT'S LETTER**, page 50

Inside This Issue

FEATURES

- From the Editor.** *Decision Line* Editor Krishna S. Dhir provides an overview of 41(5) feature articles. **3**
- DSI Election Special Feature.** Candidates for the position of DSI president-elect provide their vision statements for the 2011 election of officers. **4**
- 2009 DSI Instructional Innovation Competition Award Finalist.** "Community Engagement through Operations," by Ravi S. Behara, Florida Atlantic University. **6**
- 2009 DSI Instructional Innovation Competition Award Finalist.** "Global Business in a Digital World: Short-term Study Abroad in Emerging Economies," by P. Candace Deans, University of Richmond. **10**
- Feature Article.** "Online Gradebooks: Facilitating Student Self-Monitoring Tendencies and Academic Performance," by Deanna Geddes, Temple University. **13**
- POM Issues.** "Incomplete Information Inventory Models," by Suresh P. Sethi, University of Texas at Dallas. **16**
- E-Commerce.** "Browsers, Businesses, and Bandwidth," by Michael Mahfood, Managing Partner of Group M7. **20**
- The Dean's Perspective.** "Introduction to the Center for Education on Social Responsibility," by Donna Sockell and Francy Stewart Milner, University of Colorado at Boulder. **23**
- From the Bookshelf.** "Book Review: Excel Basics to Blackbelt—An Accelerated Guide to Decision Support Systems," by Francis D. (Doug) Tuggle, Chapman University. **27**

SPECIAL REPORTS

- Decision Sciences Journal Focused Issues** **31**
- 2010 Program Chair's Message** **33**

DEPARTMENTS

- Names in the News** **26**
- Announcements** **32**
- Marketplace** **51**

DECISION LINE

DECISION LINE is published five times a year by the Decision Sciences Institute to provide a medium of communication and a forum for expression by its members, and to provide for dialogue among academic and practitioner members in the discipline. For more information about the Institute, please call 404-413-7710.

News Items: Send your news items and announcements to the editor at the address below.

Advertising: For information on agency commissions, annual contract discounts, and camera-ready copy, contact the managing editor. Market-place classifieds (job placement listings) are \$60 per 50 words.

Annual Subscription Rate: \$20 for individuals and \$30 for institutions (add \$10 if outside U.S. or Canada). Claims for missing issues will be honored free of charge within three months after the publication of the issues for U.S. and Canadian subscribers (six months for foreign subscribers).

Membership Information/Change of Address: Contact the Decision Sciences Institute, J. Mack Robinson College of Business, Georgia State University, Atlanta, GA 30303, 404-413-7710, fax: 404-413-7714, dsi@gsu.edu.

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DEADLINES: Jan. 2011 issue.....Dec. 20
March 2011 issue Feb. 10

Subscription form for nonmembers

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Autumn is here again! It is time to start packing our bags for San Diego, the maritime city named by the Spanish entrepreneur-explorer Sebastian Vizcaino after Saint Didacus and his flag ship, San Diego. Program Chair Morgan Swink of Texas Christian University has put together yet another outstanding program for our annual meeting. We shall hear Wickham Skinner, the guru of operations strategy. Richard Schonberger will be there as well. Executives from Microsoft, Cenium, and other companies will join us, too. There are a number of new initiatives planned for the upcoming meeting. President Keong Leong charts these in the President's Letter.

Each year, we invite the finalists of the DSI Instructional Innovation Competition to share their excellent contributions with *Decision Line* readers. This issue carries two recognized works, one by Ravi S. Behara of Florida Atlantic University and the other by Candace Dean of the University of Richmond.

Often materials managers do not have full knowledge of inventories needed. In such environment of incomplete information, classical inventory control approaches prove inadequate. In the Production/Operations Management feature column, we offer an essay authored by Suresh P. Sethi of the University of Texas at Dallas. Professor Sethi discusses Incomplete Information Inventory Models and describes the difficulties introduced by the uncertainties.

Deanna Geddes of Temple University shares with us her thoughts on "Online Gradebooks: Facilitating Student Self-Monitoring Tendencies and Academic Performance," under the feature column, In the Classroom. She finds that students like, and even prefer, online gradebook monitoring as a mode of seeking feedback. She reports that in her investigations, "online gradebook monitoring proved to be a robust predictor of their academic achievement," and student learning increases as well.

Michael Mahfood, managing partner of Group M7 reminisces, "One day in 1994, I was just minding my own business and

a client...asked me if I had heard of the World Wide Web yet... While her question caught me off guard... I just let her keep talking and tried to follow along." That was the beginning of graphic artist Michael Mahfood's transformation into technology savvy entrepreneur. In the E-Commerce feature column, we bring you his excellent first-person account of the evolution of the World Wide Web. Commenting on the development of the Web, he observes, "[T]hose of us who started in the earliest days of the Web-based Internet made it happen to the delight... of those... who let it happen and the chagrin of those who wonder what happened."

In the Deans' Perspective feature column, Donna Sockell and Francy Milner of the University of Colorado offer an "Introduction to the Center for Education on Social Responsibility" at the Leeds School of Business. They describe how the Leeds School infuses in its graduates a commitment to social responsibility and impart to them skills they will need "to meet the ethical and social challenges of a highly competitive, increasingly complex business world."

In the Bookshelf section, Doug Tuttle of Chapman University reviews Elliot Bendoly's *Excel Basics to Blackbelt—An Accelerated Guide to Decision Support Systems*. Tuttle says, "It [the book] has earned a respected place on my bookshelf in as much as I am able to find it quickly and move it closer to my computer so I can readily refer to it as I develop my own business intelligence models."

In the January 2010 issue of *Decision Line* we described Managing Editor Hal Jacobs' new book, *Ball Crazy: Confessions of a Dad-Coach*. In September 2010, his book received a starred review in *Publisher's Weekly*. Please join me in congratulating Hal on receiving this prestigious mark of excellence!

We hope that this issue will be useful in helping you get the most out of the upcoming annual meeting. We look forward to seeing you in San Diego! ■



Krishna S. Dhir

is the Henry Gund Professor of Management at Berry College in Mount Berry, Georgia. He earned his PhD from the University of Colorado at Boulder, MBA from the University of Hawaii, MS in Chemical Engineering from

Michigan State University, and a BTech from the Indian Institute of Technology – Bombay. He has published in numerous journals, including Applied Mathematical Modeling, Corporate Communications: An International Journal, Decision Sciences, IEEE Transactions on Engineering Management, International Journal of the Sociology of Language, and Journal of Information and Optimization Sciences. He has received various DSI awards, including Dennis E. Grawoig Distinguished Service Award in 2008, WDSI's Jimmy D. Barnes Distinguished Service Award in 2009, Best Theoretical/Empirical Research Paper Award at the 1993 Annual Meeting in Washington, DC, and Best Application Paper Award at the 1999 International Meeting in Athens, Greece. The Penn State Harrisburg awarded him its 2001 James A. Jordan Jr. Award, and 2000 Provost's Award, both for teaching excellence. kdhir@berry.edu

Michael Mahfood

The two candidates for the position of DSI president-elect—Jeet Gupta of the University of Alabama in Huntsville and E. Powell Robinson of Texas A&M University—provide their vision statements for the 2011 election of officers.



Jeet Gupta

The world is rapidly moving towards globalization and collaboration. Since its founding, DSI is interdisciplinary (or cross-disciplinary or multi-disciplinary as some of our colleagues like to refer to it) and international in scope. These themes of globalization and collaboration are consistent with the message from our recent DSI past presidents, starting with Tom Callarman and continuing with Mark Davis, Ken Kendall, Norma Harrison, and Ram Narasimhan. Our current DSI President Keong Leong and President-Elect Krishna Dhir also echo the same message: we need to work on globalization and collaboration to remain consistent in our vision and activities. In my opinion, DSI must consider these three imperatives (globalization, collaboration, and membership/professional service) in the formulation of its vision, mission, and priorities. Let me elaborate on each.

Globalization Imperative. We organize an international DSI conference every other year and an annual conference in the USA. We have five regions in the USA and four international regions (Asia-Pacific, Indian Subcontinent, Mexico, and Europe). However, only about 18 percent of members are from outside the United States whereas at least 30 percent of Production and Operations Management Society (POMS), Association of Information Systems (AIS) and Academy of Management members are from outside the USA. Further, about 7 percent of our conference participants are from outside the USA, POMS and AIS attract about 35% of their conference participants from other parts of the world.

As a result of serving DSI in various capacities including as a board member and having served in leadership capacities in other societies, like the president of POMS, I have first-hand experience of the thrill and excitement generated by

interacting with colleagues from around the world. These global experiences have been a constant source of value and professional growth for me. To continue to serve our members and profession, we must leverage our existing strengths and global linkages with our business schools to attract more decision science colleagues from around the world to participate in our conferences, publish in our journals, and become active members of DSI.

Collaboration Imperative. DSI started with the belief that decision making processes require a team approach and expertise from multiple disciplines to examine multi-dimensional issues.

In my own experience as a faculty member in various business schools and in participating in DSI, POMS, and other societies, I find that the rewards of collaboration outweigh its costs. To continue to serve our members and the profession of decision sciences, DSI must remain true to its core value of collaboration and expand the interdisciplinary nature of its activities in teaching, research, and global outreach.

Service Imperative. The overarching core value of DSI is to serve its members and the profession. We organize conferences so people can share their thoughts. We publish journals so we can disseminate our research findings and learn of the work of others. We prepare our younger colleagues (doctoral students and new faculty members) for excellence in teaching and research. Emerging technology has changed the notion of service making agility, accessibility, and adaptability as key ingredients of excellence service.

Today, I can communicate with my students and research partners around the globe on a 24/7 basis and adopt my communications to each individual's desires and needs. To continue its core value of service, therefore, DSI must be a platform for deploying emerging information and social networking technolo-

gies to transform the services provided to our members.

DSI Vision and Priorities. Taking into account the three imperatives of globalization, collaboration, and service, my vision for DSI is to be the first choice of decision science colleagues and be committed to excellence in fostering, disseminating, and deploying knowledge about decision sciences throughout the world. In my view, DSI is a global society of decision science colleagues and hence must make the attainment of excellent global standing as its mission. To achieve this vision and mission and to take the lead to respond to the emerging needs of our future colleagues, I suggest the following five priorities for DSI over the next few years:

- Enhance and improve the global stature of DSI by increasing the number of the international members who are active participants at our conferences, publish in our flagship journals, and promote decision sciences in their respective regions.
- Move towards the creation of a holistic, collaborative, service-oriented, global organization by enhancing and improving the relationship of the parent DSI organization with the DSI regions so that each is supported by others and create a symbiotic bond between them.
- Collaborate with other academic and professional societies, like PMI, IP-SERA, POMS, AIS, and EUROMA to develop agile, adaptable and flexible programs and services for our members and decision science colleagues.
- Improve the reputation of all our journals, especially our flagship journal (DSJ) and the focused-area journal (DSJIE) to make it the top journal in decision science related areas.

GUPTA VISION STATEMENT, see page 50



E. Powell Robinson

Throughout my career, DSI has provided a foundation for my professional growth. Having received so much from DSI during my career, it

would be an honor to dedicate my energies as President-Elect to the further the advancement of DSI so that others can enjoy the many benefits I have experienced.

Qualifications Statement. As a doctoral student I was fortunate to attend the first Doctoral Student Consortium. That experience motivated me to establish DSI as my professional society of choice. Since then I have actively participated in DSI as a presenter, paper reviewer, panelist, paper discussant, session chair, multiple times as track chair, co-chair of the Doctoral Student Consortium, Chair of the Case Competition, Chair of the Best Paper Award, Proceedings Coordinator, Editorial Review Board of *DSJ*, member and chair of several national committees, Co-chair of Professional and Faculty Development Program (2010) and National VP-At Large (2006-08). These experiences provided me with a working knowledge of DSI and established close working relationships with DSI's leadership team. I served on the Board with the current President, President-Elect and the five past presidents. Through our collaborations, we debated and established a shared vision for enriching the future of DSI. Many elements of this vision are coming to life, such as improving the quality of all DSI offerings and globalizing DSI. Should I be elected, I will be able to stay the course and provide continuity for accomplishing the strategic objectives set forth by the Board over the past several years.

For the past 4.5 years I have been department head of the Information and Operations Management Department at Texas A&M University. During my term, I have learned to build consensus, motivate faculty toward accomplishing group objectives (e.g., we grew our student base from 297 to 520 students), be responsive to the career needs of junior and senior level faculty members, and

work with faculty members from a wide variety of disciplines. These are valuable leadership skills that will benefit the DSI Board. Should I be elected I will step down as department head and devote my full energies to being DSI President-Elect.

Vision Statement. My vision statement for DSI is to *Enhance the Brand Image of DSI* such that it is recognized as the: Premier professional society for the advancement, fostering, and dissemination of the science and practice of decision-making. This can only be accomplished by aligning DSI's product offerings with the professional development needs of the membership, striving for the highest quality in all that we do, embracing inclusiveness and cross-disciplinary, leveraging information technologies, enhancing the prestige of our journals, continually improving the value proposition of the conferences, expanding the global footprint, and communicating DSI's accomplishments across our peer groups.

List of Priorities. My list of priorities center on building the DSI membership base by making the society more responsive to member needs and seizing opportunities in the marketplace. Several focal points are given below.

- Improve the quality of DSI product offerings (conferences, journals, websites, divisions, etc.). The society is taking focused steps in this direction. This is evidenced in the structure and planning for the 2010 conference, increased participation of DSI Fellows in the conference, improvement in journal impact factors, board focus on improving the society's information systems, internationalization of the society, etc. It is important to maintain continuity of improvement in these areas.
- Maintain superior performance in Job Placement.
- As a Board Member, I advocated the creation of functional and cross-disciplinary special interest groups (SIGS). SIGS provide a focal point for networking and research/teaching collaboration. While we embrace a cross-disciplinary philosophy, we must also

recognize that junior faculty members are promoted through functionally oriented departments. Hence, it is critical to provide opportunities for functional as well as inter-disciplinary development. I'm encouraged to see several SIGS being launched at the 2010 Conference including Health Care, Innovation and Entrepreneurship and Project Management. Additional SIGS focused on service systems, technology management, supply chain, strategy, societal problems, etc could potentially benefit the membership.

- A critical value proposition for the DSI membership and an indicator of excellence for every professional society are the quality of its academic journals. The DSI is fortunate to have two highly acclaimed multi-disciplinary journal—*DSJ* and *DSJIE*—as well as *Decision Line*, the official news publication of the institute. Maintaining and building upon their stellar reputations would be a main priority should I be selected at President-Elect.
- DSI is multi-disciplinary with deep roots in the operations management, MIS marketing, management and other disciplines. The most rapidly emerging business discipline today is supply chain management (SCM). However, SCM by its very nature is multi-disciplinary with strong links to marketing, finance, information technology, operations management, strategy, global business, economics, logistics, etc. As such, a compelling argument can be made to establish DSI as the premier home for SCM scholarly activities. This could have a positive impact on the membership base and Brand Image without out distracting DSI from its multi-disciplinary philosophy.
- DSI has made great strides in expanding its international regions and activities. It is important to nurture these regions and aid in their development and success. They are critical to

ROBINSON VISION STATEMENT, see page 51

Community Engagement through Operations

by Ravi S. Behara, Florida Atlantic University

There is growing interest in applying management expertise to community service efforts at universities and corporations. The Carnegie Foundation for the Advancement of Teaching has created a new elective Community Engagement classification to affirm the importance of community engagement in the agenda of higher education.¹ They recommend universities give high priority to connect with their communities, so as to deepen students' civic and academic learning, as well as enhance community well-being. One approach to incorporate this into any curriculum is to implement Academic Service-Learning.

Academic Service Learning

Academic Service-Learning² (ASL), or Service-Learning as it is also called, is a pedagogy that integrates intentional ways of community service with instruction and reflection. ASL incorporates community work into the curriculum, giving students real-world learning experiences that enhance their academic learning while providing a tangible benefit for the community. It is a teaching and learning strategy that enriches the learning experience, teach civic responsibility, and strengthen communities.

ASL is a teaching and learning method that upholds a commitment to appreciating the assets of and *serving the needs of a community partner while enhancing student learning and academic rigor through the practice of intentional reflective thinking and responsive civic action.* ASL combines service objectives with learning objectives with the intent that the activity would change both the recipient and the provider of the service. This is accomplished by combining service tasks

with structured opportunities that link the task to self-reflection, self-discovery, and the acquisition and comprehension of values, skills, and knowledge content. ASL incorporates community work into the curriculum, giving students real-world learning experiences that enhance their academic learning while providing a tangible benefit for the community. It also helps students develop teamwork and collaborative problem-solving skills as they apply their academic training to real-world civic challenges in their own communities.

ASL differs from traditional volunteer activities in that it involves applying domain-specific knowledge from a specific discipline, which in this case is Operations Management, and includes students reflecting on their experiences to enhance learning. It also differs from internships in that it involves reflection and community work.

Specifically, from a business school student's traditional for-profit training, it also exposes students to a more challenging problem context where the objective function is not merely in addressing financial bottom-line issues, but also help address the social and environmental bottom-line, that is, the triple bottom line.³

Stakeholder Benefits

All stakeholders in the ASL effort have distinct advantages. The client community organizations that participate in ASL receive the service from students' activities as well as increased public awareness of their mission and needs. But in addition to receiving service from the University, ASL projects help build long-lasting relationships between the two organizations. Participating in ASL also helps increase



Ravi S. Behara

is an associate professor in the Department of Information Technology & Operations Management in the College of Business at Florida Atlantic University. His current re-

search interests include operational risk, knowledge networks, and service analytics. This Community Engagement through Operations project was one of the finalists for the 2009 DSI Instructional Innovation Award.

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the awareness of the specific community organization. This could result in more volunteers from the university, increased financial contributions from the faculty, students and their families.

In addition to benefits to the community served and the University demonstrating community engagement, both students and faculty stand to gain. Students develop a heightened awareness of the social issues that exist in their communities, providing them with a good foundation on which to build as they enter their professions. This could lead some students to play leadership roles in their communities. It also opens students' minds to career options in the social sector that they may not have considered, such as social entrepreneurship or working for not-for-profit organizations. Additionally, students have a notation on their degree transcripts indicating the number of hours they have worked on a community-focused ASL project. This is certainly an added advantage in their professional careers.

The main benefit I received as a faculty member was an increase in student engagement in the course. I personally also had the satisfaction of seeing students apply their knowledge to help improve the community in which they live. Finally, this effort has also provided me an opportunity to publish in the area of teaching pedagogy. While this has some academic value, the greater value of publishing is that it helps disseminate ideas about ASL among like-minded faculty, thereby increasing the potential impact of Operations Management on our communities. Both faculty and students benefit by being more socially responsible citizens, and since actions speak louder than words, ASL has the potential to also contribute to the larger call for greater social responsibility in the business world. I believe this has a greater impact than simply teaching about corporate social responsibility through texts and case studies. To use a highly overused quote by Gandhi, "Be the change that you want to see in the world." This is true for students and it is for faculty. But Gandhi also said "In a gentle way, you can shake the world." So

ASL provides Operations Management faculty and students to make a significant impact through their actions.

Class Projects

I used ASL as part of my undergraduate Operations Management course in three different classes (about 40 students each). Students were either juniors or seniors in the BBA program. About 30-40 percent of the students who participated were either full-time or part-time employed. The class worked with a local food-pantry, an environmental protection organization, and a community garden. Students worked in teams on specific operations problems that were identified by these non-profit community organizations. These projects were related to issues such as service strategy, project management, service design, sourcing, and forecasting. Students presented the results to the organizations, and were well received. Not only did this approach increase the relevance of the course material, but it also increased the personal awareness of my students to the issues in our community. Specifically, the group that worked on the Food Pantry project (see below) in the summer of 2008 at the height of the great recession, recognized how widespread the problem of hunger is in the United States. In a land of plenty, one in six Americans go hungry every day.⁴ They also recognized that it is not always about the homeless or unemployed, but that many millions of working-poor are affected.

Content: The ASL projects undertaken in this assignment were primarily consulting projects. That is, they involved research and planning towards a specific goal. These were designed to provide actionable plans for either the client organization's staff or volunteers to execute. As stated earlier, the specific topics addressed depend on the needs of the individual non-profit organization. Some of the topics addressed and the reason for their selection are discussed below:

1. **Service Design:** Increased demand for food and lower voluntary financial contributions led to a significant increased demand with a simultaneous budget shortfall for the Community Food Pantry (CFP) in 2008. A *Dollar-for-Food Project* was designed as a fundraising effort to generate additional revenues that could then be used to purchase food for distribution.
2. **Forecasting:** CFP was faced with lower inventories and increasing demand midway through 2008. They wanted to have some estimate of their total food needs for the remainder of the year. The *Demand (Need) Forecasting Project* developed various forecasts based on their historical data to give CFP information to help in planning. An example of the forecast for pasta needs is shown in Figure 1.
3. **Sourcing:** The increased demand for food at the CFP in 2008 with a budget shortfall meant there was a need to

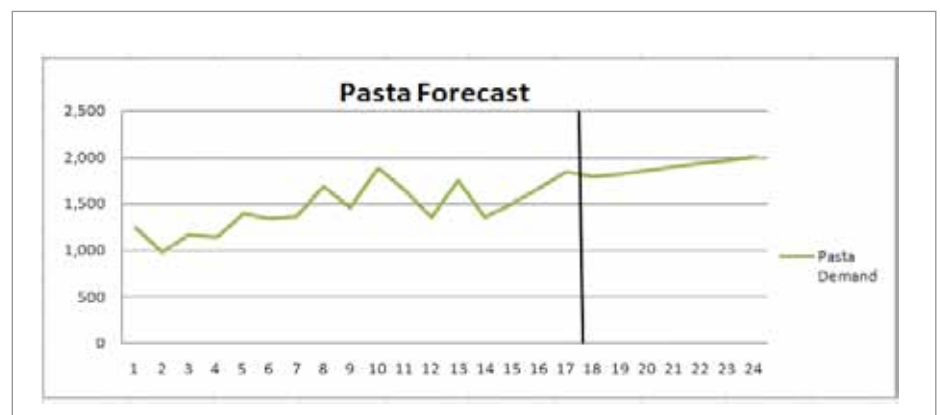


Figure 1: Forecast for pasta bags demand in second-half of 2008.

American Italian Pasta Company

Please provide details as to how much pasta you are requesting for this donation. I will also need to know the name, address, phone, & contact information for the food pantry. With this requested information, I can then submit the request for approval. If approved, I will contact you with further details. Request should be made on company letterhead.

Contact information: Christie Burch, *American Italian Pasta Company*, 1000 Italian Way, Excelsior Springs, MO 64024; Phone (816) 502-6296, Fax (816) 502-6396.

Figure 2: Information about free source of food.

stretch each contributed dollar. So the *Free and Low-Cost Sourcing Project* was charged with identifying both free and low-cost non-perishable food sources that could be contacted by the CFP. An example of the response from a food manufacturer and the contact information that was provided to CFP is shown in Figure 2. It was a requirement that students provide information in a format that was usable by staff and volunteers at CFP, not as a typical student essay.

Organization. I used the services of the University Civic Engagement/Volunteer Services group to help identify and meet with the non-profit client organizations we worked with. I met with coordinators, managers, and executives at the specific organizations to identify their needs. I then formulated a number of smaller projects, when taken together, addressed the organizations needs. Each organization had five to six projects, and five to eight students were assigned to each project.

Presentation. Student teams produced written reports that were given to the client organizations. While it would be ideal for the student teams to present to the client organizations themselves, lack of time at the end of a semester did not allow for this. I made presentations to the clients, on behalf of the students, after the semester was completed.

Effectiveness. In the ASL approach, effectiveness and benefits to students are captured in their reflection statements,

such as “We were grateful for the opportunity to lend our abilities to a project whose rewards, we hope, will contribute to our community as well”; “Until we undertook this project none of us were fully aware of the scope of the problem and its root causes”; “Awareness is probably one of the biggest problems in what is progressively becoming a crisis in this nation”; and “While we as individuals may not be able to help materially, we hope that we were able to help, if even a little, by working on this project.” The CFP client wrote back: “The timing of your assistance could not have been better The students’ research and discovery of low cost sources of food, free food sources, and how to forecast our food needs, has been extremely helpful Thank you so much for helping us feed the hungry in our community!” I shared this feedback with all the students involved in the project.

Conclusion

Faculty at any U.S. university/college can adopt ASL in their Operations Management (and other) courses². Non-U.S. universities/colleges can also adopt this approach based on their specific academic and community environments, and can refer to the international service learning programs website for further information.⁵

There is a significant need for professional business help in many non-profit organizations. As such, any of the core courses in all functional areas of the business curriculum can take advantage of the ASL pedagogy to engage their

students in the course content as well as the community in which they live. It is usually a very rewarding experience to both faculty and students!

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Global Business in a Digital World: Short-term Study Abroad in Emerging Economies

by P. Candace Deans, University of Richmond

Global Business in a Digital World is a short-term study abroad program developed at the University of Richmond to enhance learning opportunities primarily targeted to business students but includes students majoring in a variety of disciplines. Curriculum integration across business functions and other academic disciplines is a major goal of the program. Collaboration technologies and social media tools are used in the learning process to demonstrate the challenges and opportunities these technologies may offer for communication, collaboration, and work flows across borders. Students learn about the challenges and opportunities of doing business in other parts of the world as well as ways in which technology plays a major role in bringing the world closer together.

The Internet paved the way for globalization and the new world order as it is unfolding today. Collaboration technologies and social media provide still another dimension to understanding and interacting with cultures around the world. As students experiment with these technologies in other countries, they have an enhanced understanding of the value and possibilities these technologies provide companies. In addition, they better understand how these technologies can enhance decision making across borders. The focus of the program is on emerging economies since these countries represent the growth areas and potential opportunities for businesses over the next several decades. The BRIC countries (Brazil, Russia, India and China) represent some of the greatest short-term opportunities, while parts of the Middle East and Africa are emerging as areas of great interest for countries

and companies in the future (Zakaria, 2008). Firsthand experiences in these countries give students an awareness and understanding of the implications of the global economy and its impact on future business. Students today who want to progress in their careers and provide added value to companies will need international experience and a global mindset to navigate this new landscape.

Course Design

Connecting business, technology, and people worldwide is the central theme for this series of courses. A full credit course is developed for each country to be studied. Although the program is in the initial stages of development, courses have been implemented for China (May 2009 and 2010) and the Middle East (December 2008 and 2009). Approximately 10 students participated in each of these courses for a total of 40 students completing either the China or Middle East class. It is expected that the number of students per course will increase as additional funding is secured to make this possible. Each course has a semester component that is supplemented by a two-week study abroad in the country. During the semester students are exposed to lectures from experts in language, history, art, literature, geography, culture, anthropology, and law. Students also study international business issues and economic trends through classroom cases and lectures by company executives in the U.S. While in the country students visit companies and hear executives speak from both local and multinational companies. They also attend lectures by local university faculty in schools in the country. Students are provided with numerous online sources



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of information. They are expected to read articles, books, and newspapers as appropriate. A comprehensive project individualized to each student's needs and interests is an additional requirement of the course. Participants are responsible for the majority of the costs, but the university does provide a supplement to help students offset some of the expenses. Corporate sponsorships and other donations are being solicited to provide long-term resources to support the program as it develops to include additional countries and opportunities. Initially the program is targeted for undergraduates, but it can be expanded to MBA and executive programs.

Major Objectives of the Program

The major objectives include the following:

- Provide a short-term study abroad opportunity for students who may not have any other opportunity for an international experience.
- Integrate curriculum initiatives across the business functions and liberal arts.
- Incorporate global communications and related technology experiences into the study-abroad learning experience.
- Through a supervised comprehensive project, provide a learning experience that gives students knowledge of opportunities and obstacles associated with doing business in other countries and in making global business decisions.
- Provide international opportunities in areas of the world currently underrepresented in the offerings for business students (Asia, The Middle East, and Africa).
- Better meet the demands of the current business environment and the business community hiring graduates.
- Incorporate experiential learning activities into the business school curriculum.
- Provide a firsthand perspective from executives of local and multinational companies operating in a given part of the world and an appreciation of the political, legal, regulatory, cultural, and economic issues that impact business operations in other countries.

International Content

The course content reflects the growing influence of emerging economies on global business. For the China course, students visit companies and participate in cultural activities in Shanghai, Beijing, Dalian, Xian, Hong Kong, and Macau. This gives the students an array of experiences and a framework for comparison across cities. Students study business in Dubai, Abu Dhabi, Qatar, and Bahrain as part of the Middle East class. They attend university lectures and visit financial institutions to learn about trends in financial markets around the world.

The Middle East has been ignored in most business school curriculums and Asia has only recently become a focus of study abroad for business students. The Middle East is becoming an important area for business given the importance of oil and gas in these regions and the emergence of the Gulf region as a more significant gateway for trade between Asia and Europe. The role of Islam in shaping business practices and an understanding of Islamic finance are examples of areas in which students explore in the class. A concentration in Middle Eastern studies has recently been implemented as part of the international education strategy for the university. Resources have been allocated for faculty to teach the Arabic language and to support development of curriculum for this concentration. This short-term study-abroad course focusing on business practices adds an offering in support of this concentration. The business aspect provides a unique component and different perspective for traditional liberal arts students.

The focus on Asia and particularly China and India has become more important for business in recent years with the emergence of offshoring and outsourcing in these countries (Meredith, 2006). Much of the innovation for companies in the

future will be directed to consumers in the developing world in those countries with an emerging middle class that now has money to spend on new products (Prahalad, 2006). Technology will play a major role in developing innovations that address unique needs of consumers in these countries. Innovation in technology will be key to reaching this part of the world population now referred to as the 86% market (Mahajan & Banga, 2006). For example, it is interesting to observe people with no electricity use cell phones they charge at a local store. Students begin to see the potential for innovation in these developing markets.

Technology Components: Collaboration, Communication, and Social Media

Students get hands-on experience using technologies in the country they visit. These include wikis, blogs, podcasts, twitter, RSS feeds, Skype, mash-ups, social networks (Facebook), virtual worlds (second life), wireless technologies, video conferencing, electronic meetings, and other social content applications. Specific exercises are incorporated through both collaborative team projects and individual assignments. Faculty across disciplines (e.g., economics, marketing, finance, geography) serve as advisors to students on their projects for the class.

The explosion of new Web 2.0 technologies and Enterprise 2.0 applications have provided opportunities for businesses to integrate these technologies into their marketing campaigns, project management, and manufacturing operations worldwide (McAfee, 2009; Li & Bernoff, 2008). An array of language, cultural, legal, regulatory, political, and economic issues may become significant as companies utilize these technologies in settings outside of the U.S. At the same time, these technologies are bringing the world closer together and will provide competitive advantage to those who utilize these technologies effectively. There is also potential for cost savings for companies who use the technologies to address issues such as replacing travel with electronic meetings. Firsthand

experience with these technologies in a particular country provide students with a better understanding of how these technologies may pose obstacles for company strategies while at the same time provide advantages for companies who know how to utilize the technologies effectively.

The following communications and social media technologies are used in the courses.

A **Wiki** is used as the backbone textbook for the class and as a collaboration tool. The material is developed through student research. During the study-abroad experience the students are required to write a collaborative journal of their experiences and include links to important information, photos, and discussion threads. The wiki is password-protected, but the parents of students and others at the university have access to the content so that they can read about the adventures of the students while they are participating in the activities of the trip.

Podcasts are used to record important lectures and speaker presentations. Video podcasts are also used for professor lectures and important information. Students are required to subscribe to podcasts provided by companies such as Gartner, a leading IT research firm. In addition, students record podcasts of chapter summaries of some of the books they are reading. They can share the workload of reading a book and listen to the other summaries on their iPod while walking or exercising. Podcasts are posted to the wiki.

Blogs are used for discussion of major topics and to express opinions on issues and current events. Students take on specific roles or topics for their participation on the blog. Students from universities in the country being visited also participate, which gives different viewpoints and enhances the global communication experience for the students.

Micro-blogs (Twitter) are used for short clips to remind students of upcoming activities or notify them spontaneously of a change in plans or other events. This is a good way to track students while on the trip. Others can keep track of fellow students and everyone's

schedule. If someone is lost, it is a way to get in touch quickly. Of course, students must frequently update their status for this to be effective. It also requires access to a cell phone or Internet, which can be a problem at times in other countries.

Mash-ups are used for applications that students may find helpful in the context of this class. There are thousands of these available for students to research.

YouTube is used as a means for recording short videos and posting these for those back in the U.S. to see in real time. For some activities it is the only means for capturing the content.

RSS (really simple syndication) is used to get feeds of relevant information and organize the information related to the course content.

Virtual worlds (Second Life) are used as the platform to experiment with a class exercise that includes students from both countries.

Electronic meetings (Breeze) are used to conduct workshops across borders with students in both countries.

Video conferencing brings in speakers from other countries to the classroom in the U.S. Time differences pose some issues, but careful scheduling takes care of most of these problems.

Other technologies are used as appropriate. Wireless technologies, cell phone usage in other countries, and Internet access and usage are part of the experience. Students can contemplate how companies might design their collaboration and social media strategies to meet the needs of their international operations.

Conclusions

The effectiveness of this approach and specific benefits were more substantial than anticipated. All of our main objectives were met. Most of the students participating in the program did so because they did not have other opportunities to study abroad. Diversity in student participation was encouraged and actively pursued. Curriculum integration was a major accomplishment both in terms of course content and faculty involvement. The student projects were exceptional because of the enthusiasm and motivation

that was developed from the time spent in the country. Students learned firsthand about the obstacles and frustrations of using technologies in other parts of the world. In some cases they were surprised by the technological advancements. Most of the developing world utilize cell phone technology and Internet access, and its use is increasing rapidly. This opportunity gives students expertise that is recognized as valuable by the business community. Several students anticipate applying for jobs in places outside the U.S. These trends represent a paradigm shift in the way students view their future career opportunities and also reflect current hiring strategies of companies. Curriculum initiatives such as these short-term study abroad opportunities give students the added value necessary for competing in the global labor market of the future.

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Online Gradebooks: Facilitating Student Self-Monitoring Tendencies and Academic Performance

by Deanna Geddes, Temple University

Lifelong or self-regulated learning suggests active participation in one's ongoing education and growth. It reflects individuals' ability, desire, and efforts to continuously learn and improve as they progress academically and/or professionally. A key component of self regulation includes self monitoring—ongoing pursuit of the question “How am I doing?” This tendency can promote changes in behavior that improve both learning and performance.

In a recent study, I examined student feedback seeking techniques as a form of self-monitoring (Geddes, 2009). Feedback seeking is behavior in which individuals actively pursue and acquire relevant information about their performance. It involves both *inquiry*, where students directly ask available sources about their performance (i.e., peers, teachers) and *monitoring*, where students observe environmental cues to obtain information about their performance (e.g., marked papers, posted grades, witnessed conversations, etc.). Of particular interest to me was the potential impact of information technologies for promoting or enhancing self-monitoring and feedback seeking practices.

As a regular Blackboard user—including its online gradebook option—I wondered if regular, unimpeded, and private performance monitoring by students accessing online gradebooks was an effective self-regulated learning activity for enhancing classroom performance. As simple *outcome* feedback, information provided through online gradebooks does not tell students how they should improve their performance as does process feedback. Nevertheless, it does indicate how well they have al-

ready performed—prompting students to understand that improvement may be necessary. This research examined online gradebook monitoring tendency and impact in relation to other forms of classroom performance feedback seeking, including student use of instructor and peer inquiry and monitoring.

Online Monitoring Stands Out

My research showed that online gradebook monitoring was students' most utilized and preferred form of feedback-seeking. Most notably, however, online gradebook monitoring proved to be a robust predictor of their academic achievement. No other feedback-seeking practice examined in the study predicted student final course grade. The significant findings overwhelmingly indicate a pedagogical benefit of students monitoring their classroom performance by accessing online gradebooks. Results point to the value and importance of faculty providing timely assignment performance information online to students.

Another finding that was initially surprising indicated a negative relationship between instructor inquiry and student final grade. However, it is reasonable to assume that students often approached faculty *because* they were doing poorly in class. Many educational institutions now require faculty to inform first- and second-year students of unsatisfactory performance by the fifth week of class—based on attendance, assignments, exams, or any combination of the three. This allows students the opportunity to drop the course or, preferably, to change their approach or effort. Online gradebook monitoring serves a similar function. Faculty who are prompt



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in posting assignment grades online help students become aware of performance problems earlier in the semester, which may prompt them to approach instructors or peers sooner for assistance.

Online monitoring also may interact or combine with other feedback-seeking techniques over the course of the semester. In the work environment, impression concerns are especially salient for newcomers; consequently, they were likely to initially use monitoring more than inquiry when feedback seeking. Monitoring tends to remain constant overtime, while peer inquiry, in particular, declines. The primary form of feedback seeking tends to be monitoring, with inquiry used only if monitoring proves insufficient, such as when students seek information unavailable except through inquiry (e.g., process feedback). Thus, limitations of one strategy of feedback seeking may be overcome by adding another approach. In other words, *combining* monitoring and inquiry can increase clarity with regard to performance. Still to be determined, however, is if the absence of online monitoring—either by choice or through a lack of availability—leads to significant use of other feedback-seeking strategies or simply less self-monitoring overall. In other words, could failure to post grades online throughout the semester have a detrimental effect on student academic performance? This question will hopefully prompt some additional research.

Goal Orientation and Online Monitoring

I also examined goal orientation in relation to student feedback seeking strategies. Goal orientation is considered primarily a dispositional goal preference that manifests in achievement environments (Dweck, 1986). Students with a learning or mastery goal orientation want to increase their competence and master new skills. For them, performance feedback (positive or negative) gives useful diagnostic information (VandeWalle, Ganesan, Challagalla, & Brown, 2000). In contrast, performance goal orientation reflects a desire to demonstrate and validate the adequacy of one's ability. Performance feedback to these individu-

als is a judgment of their competency and intellectual worth. Consequently, students with this orientation are motivated to seek positive (performance-prove) and avoid negative feedback (performance-avoid) about their performance.

My study findings indicated that both learning and performance-prove goal orientations increased online gradebook monitoring. Learning goal oriented individuals tend to use self referents (e.g., examining their current performance with their previous performance) while performance goal oriented individuals often use external referents (e.g., examining their performance in relation to others' performance). Importantly, online gradebooks allows for comparison with both self (previous assignment scores) and other referents (class averages). Both learning orientations also used instructor inquiry as a form of feedback seeking. Importantly, this result shows that one tendency does not negate the other. These two self-monitoring/feedback-seeking practices can work concurrently, perhaps with online monitoring triggering subsequent instructor inquiry for clarification or assistance.

Benefits of Social Comparison Information

Two explanations for monitoring (versus inquiry) preferences exist in the literature, typically associated with performance-goal oriented individuals: (1) external referents providing social comparison information and (2) reduced impression management/ego risks to one's perceived competence or intelligence (Dweck, 1986; Nicholls, 1975). Most scholars focus on the second motive and argue that one's known or perceived performance moderates individual tendencies to seek feedback through inquiry—prompting many to use monitoring (Payne, Youngcourt, & Beaubien, 2007). However, it is possible that social comparison information may be less associated with an ego-enhancing or image-protecting function than many assert. It may instead help students gain perspective by developing a more realistic interpretation and understanding of their current class performance.

Evidence for this assertion is found in the literature on self-assessment and rater accuracy. Business students, like the organizational members they will become and manage, tend toward inflated views of their own performance. Research shows that 80 percent of individuals in achievement situations evaluate themselves as above average or better—a statistical impossibility (Pearce & Porter, 1986). This becomes problematic for individuals both as students and as future employees. Believing one's performance or relative standing is better than it really is may lead to reduced effort, increased defensiveness with regard to negative feedback, and less motivation to change one's behavior over time. Once graduated, individuals who inflate self-ratings are more likely to be evaluated as poor employees by their respective managers.

To combat inflated views of one's performance and enhance the accuracy of self-perception and self-assessment, individuals can benefit from the opportunity for social comparisons. Self-assessments can become more realistic with specific information on how others in comparable tasks are performing. Feedback seeking through monitoring online gradebooks regularly exposes students to social comparison information, including class averages, assignment score ranges, points possible, and points attained. In addition, instructors may post sample top papers or best essay responses to class websites for students to peruse and compare. Having social comparison information available online throughout the semester can help students develop and maintain more realistic perceptions of their individual performance. This practice likely activates various self-regulated development practices as they learn if and when changes in their performance are necessary. Relatedly, however, individual traits (e.g., self-esteem, self-confidence, etc.) may also impact student interpretation of social comparison information. For instance, people with low self-esteem may interpret any particular comparison experience (upward or downward) in a negative light which might not prove beneficial or motivating for improving performance.

More Implications for Practice

Understanding self-regulated learners' motivation and tendencies can help management faculty establish learning environments that trigger or take advantage of self-monitoring practices. Further, it is important to recognize student perspectives on and experience with new technologies available in their learning environment (Hwang & Arbaugh, 2006). My research indicates online performance monitoring is both prevalent and preferred among management students. Approximately 95 percent of survey respondents agreed or strongly agreed with the survey item, "I wish all faculty would post grades online." An internal study conducted the same year these data were collected reported that while 90 percent of business faculty used the course management system, less than one third utilized its online gradebook component. Management faculty should consider the potential benefits afforded students from maintaining online gradebooks and helping develop *enhanced* self-monitoring skills needed to adapt to rapidly changing work environments.

With the ever-increasing prevalence of online gradebook use across K-12 and postsecondary educational institutions nationally, management faculty are teaching business students previously immersed in this technology, who may have already come to rely on accessing online gradebooks as a performance monitoring strategy. If this technology is underutilized by faculty, entering freshmen in particular could be disadvantaged at a vulnerable time in their educational experience. This is especially true in courses adopting a large lecture format, where it is more difficult to directly approach the instructor to elicit performance feedback.

Faculty, however, may need to do more than post grades online to promote self-monitoring among business students. Lessons learned from technology-mediated training (e-learning) show instructors often make assumptions of high levels of self-direction by students. However, my study found some students do not use any online monitoring or effectively engage in self-monitoring. Indi-

viduals induced to follow self-regulated, e-learning strategies did better on outcomes than those who were not required to do so. Thus, faculty may not only need to post grades for their students' benefit, but also convince (or reward) them to use the resource. Students convinced of the advantages of self-monitoring will be more likely to adopt one or several strategies, depending on disposition and information availability.

Another practical implication of online gradebook use includes the possibility of management faculty separating outcome from process feedback on student assignments. In the classroom, the common practice is to return essays, memos, reports, and so forth, with both (1) comments on ways to improve the paper (process feedback), and (2) the actual grade earned (outcome feedback). However, there are logical problems with managers (or faculty) acting as judge and coach simultaneously when providing performance feedback. It is no surprise that employees are less defensive and more receptive to feedback—especially negative feedback—when they see the source acting as coach or mentor, rather than judge.

Personal experience shows that when papers are returned, students immediately look for the grade, and then view written comments in light of that outcome. In other words, grades act as a perceptual anchor from which students evaluate commentary from the instructor. If the grade is low or simply lower than expected, students are likely to view the comments more defensively than if no grade is present when papers are returned. Thus, performance coaching without an immediate, corresponding ranking or rating may increase the likelihood process or developmental feedback will be accepted and utilized by students. The practice of separating process from outcome feedback is likely more common in work environments than educational settings. Nevertheless, availability of online gradebooks would allow management faculty to experiment with this delivery technique for performance information and potentially enhance the benefits of both feedback forms.

Conclusion

Over the past few decades, scholarly interest in student self-regulated learning strategies reflects recognition of its critical role in continued academic and professional success. The positive relationship between continuous learning and improved performance is at the heart of management education as well as the management function. Our students are encouraged to set high, but achievable goals, monitor their progress, and regulate their effort as they accomplish various assignments. Faculty assist in this learning process not only with a valued curriculum but also by providing timely, ongoing feedback on tasks and assessment of individual progress toward course objectives. It is important that students develop an ability to sense how well their academic efforts yield favorable results if they want success both in and out of the classroom. Online monitoring and other self-monitoring and feedback-seeking strategies can serve as vehicles to promote critical reflection that will help establish logical connections between student actions and subsequent outcomes. By promoting students' abilities and tendencies to self-monitor/self-regulate using available technologies and other accessible, reliable information sources, management faculty may improve their future growth and success in all achievement contexts—academic as well as professional.

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See **FEATURE**, page 22

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i3: Incomplete Information Inventory Models

by Suresh P. Sethi, University of Texas at Dallas

Inventory control is among the most important topics in operations research because of large investments in inventory and their effect on the profitability of the firms. A systematic analysis of inventory problems began with the development of the classical EOQ formula of Ford W. Harris in 1913, and a substantial amount of research was reported in 1958 by Kenneth J. Arrow, Samuel Karlin, and Herbert Scarf. A critical assumption in this vast literature has been that the level of inventory at any given time is fully observed. Some of the most celebrated results such as the optimality of basestock or (s, S) policies have been obtained under the assumption of full observation. Yet the inventory level is often not fully observed in practice, as elaborated below. In such an environment of incomplete information, inventories are known to be partially observed and most of the well-known inventory policies are not even admissible, let alone optimal.

Reasons for partial observation of inventory levels may include replenishment errors, employee theft, customer shoplifting, improper handling of damaged merchandise, misplaced inventories, uncertain yield, imperfect inventory audits, and incorrect recording of sales. Details on some of these causes and their consequences are provided below and further discussion is available.¹⁻³

Incorrect recording of sales. Unintentional mistakes happen from time to time in the recording of sales transactions. One example involves customer checkout at a grocery store. If a customer buys two different types of soup, each at the same price, the sales clerk often scans only one type of soup twice. In such cases, the

recorded inventory levels of the items involved will differ from their actual levels.

Misplaced inventory. When part of the inventory on hand is misplaced, it is not available to meet the demand until it is found. Often, misplaced inventories are not immediately found, so they remain unobserved by the inventory manager (IM); hence, the total inventory available to meet the demand is partially observed. Misplaced inventory can be quite large and have a significant impact on the bottom line. It was reported that customers of a leading retailer could not find 16 percent of the items in their stores because the items were misplaced.¹ Misplacement of these items reduced the retailer's profit by roughly 25 percent.

Misplacement is quite common when the location of items in storage is altered dynamically. Keeping items in fixed locations may improve record accuracy, but this may also lead to inefficient space utilization; dynamically located items may be stored in more than one location. Recent trends in supply chain management such as cross-docking also cause dynamic locations.

Spoilage. Products can naturally lose their properties while they are held in the inventory. Some examples of items with limited lifetimes are drugs, chemicals, and food products. If the lifetime of a product is limited and not immediately observed, then the actual inventory is less than the recorded inventory, and it is partially observed.

If the lifetime is deterministic, as in the case of drugs, an implementation of RFID (radio frequency identification) tags called SMC (smart medicine cabinet) can be used to track expired drugs. Thus,



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SMC can make drug spoilage fully observed. Wal-Mart has started using smart RFID tags to track individual pairs of jeans and underwear for better inventory control. If successful, RFID tags will be rolled out on other products at Wal-Mart's more than 3,750 U.S. stores.¹³ Some initial work has already been done on justification for investments in such technologies. Needless to say, such economic analyses require evaluation of the optimal cost under partial observations.¹⁰⁻¹¹

As an example of random lifetime, consider the number of batteries in a Sears retail store. Only when these batteries are inspected (say by measuring their voltage, one by one) does the inventory level of fully functioning batteries become known. When spoiled inventory is observed immediately, the associated model, in spite of being a challenge to work with, is fully observed.

In retail stores, customers can damage products, making them unsuitable for sale. Some examples of this are: tearing a package to try on a contained clothing item, erasing software on a computer used for display, spilling drinks on clothes, or scratching a car during a test drive. If such damages are not detected by the IM, the actual inventory is not fully observed.

Product Quality and Yield. When the product quality is low or a production process has a low yield, the actual inventory is not known. Receipts at a warehouse can include products that are defective or non-conforming to quality standards. It is often the case that non-conformance of a product is not immediately observed by the IM. Receipts are usually added to the inventory at the warehouse without full inspection. As a result, the inventory on record may consist of both non-defective products (available to meet customer demand) and defective products (not fit for sale). Since the defective products are not immediately observed, the actual (non-defective) inventory becomes partially observed.

If production lead times are long, an IM may have to place a particular order before observing the yields from previous orders, so that production of

the order is completed by a given due date. Thus, incomplete information about inventory can be caused by due dates, long production lead times, and uncertain process yields.

Theft. Items in the inventory can be stolen by thieves who violently break into inventory storage, by warehouse employees who calmly pilfer, or by customers who shoplift. Since break-ins are generally investigated, they are usually observed and therefore not relevant for our study. I focus more on continuous pilferage and shoplifting, because they are not always observed without inventory inspections. Instances of theft at furniture retailers and food wholesalers have been documented.⁴ Theft is a major problem resulting in value loss and inaccurate inventory records. Thus, the IM relying on inventory records over-estimates the available inventory until a stockout occurs. In this case, there are shortage costs in addition to costs incurred from reordering, expediting, and receiving replacement items. Typically, costs associated with expediting items to urgently meet backlogged demands are higher than regular costs.

Empirical research gives clear evidence of the presence of inventory record inaccuracy in a number of contexts, including government agencies and utilities. A discrepancy between recorded and actual inventory of \$142 million, or the equivalent of 21,000 ocean containers, was reported at the well-known apparel retailer The Limited.⁵ DeHoratius and Raman found inaccuracies in 65 percent of nearly 370,000 inventory records observed across 37 retail stores of another publicly held retailer.² This retailer had annual sales of roughly ten billion dollars and used automated replenishment systems to manage store inventory. Furthermore, approximately 12 percent of the recorded items audited across 37 stores had no inventory on the shelf, yet the recorded inventory quantity was positive.

The direct financial impact of lost merchandise in the retail industry is substantial. Retailers with inaccurate inventory records may incur additional costs due to the uncertainty of their

inventory positions. First, retailers may choose to buffer this uncertainty with additional inventory, or else lose sales due to stockouts. Second, inventory record inaccuracy may undermine decision support tools such as automated replenishment and automated demand forecasting systems that do not account for inventory uncertainties.¹ For example, in the presence of inventory record inaccuracy, automated replenishment systems may order when ordering is unnecessary or fail to order when they should. Raman et al. estimate that the retailer loses 10 percent of its current profit due to "freezing," which means that the retailer has no items on the shelf (and hence, no sales) but a sufficiently positive inventory record (and hence, no orders) resulting in a persistent physical stock-out. They go on to say that the problem is common among other retailers.¹ Investments in inventories can run into trillions of dollars, and so better inventory policies can result in huge savings.

By now it should be clear that the incomplete inventory information (i3) problem is quite common in practice, that policies in current use are neither optimal nor applicable, and that there is a great need in many real-life situations for better inventory control policies in systems with partially observed inventories. DeHoratius et al.⁶ identify at least three ways to deal with the issue of inventory record inaccuracy:

1. *Prevention:* Reduce or eliminate the root causes of inventory record inaccuracy through the implementation and execution of process improvement.
2. *Correction:* Identify and correct existing inventory record discrepancies through auditing policies.
3. *Integration:* Use inventory planning and decision tools robust enough to account for the presence of record inaccuracy.

In this article, I focus primarily on the third strategy devoted to finding optimal policies in the face of inaccurate inventory records. The analysis of inventory problems under partial observations

has been neglected in the past due to its mathematical difficulty. While working with a finite dimensional state space in the case of full observation, one usually has to deal with an infinite dimensional state space in the partial observation setting. In particular, in full observation cases the inventory level is often the state variable, whereas with partial observations, the system state is typically the conditional distribution of the inventory level given the partial observations. In general, the analysis takes place in the space of probability distributions.

Review and Status of the Literature

As noted, there has not been much serious mathematical analysis of the i3 problem until recently, aside from what was done by DeHoratius et al.⁶ I shall, therefore, review primarily recent research that has been done over the last five years. This research focuses mainly on i3 problems arising from the inability to observe the demand and the loss of inventory from theft or spoilage. I classify the existing models in which partial observation of the demand depends on how the sales are observed.

Inventory models with only sales observed. There have been a few studies of partial observations in inventory that are devoted to problems in which the demand is observed fully and satisfied only when it is less than the available inventory, and otherwise, only in the event that it is larger than the inventory is observed and the unsatisfied demand is lost. In other words, unmet demand is censored. It is assumed that leftover inventory in a period is salvaged entirely so that every period starts with zero inventory. This assumption decouples the periods as far as the inventory evolution is concerned. However, the periods are still coupled together by the current estimate of the demand distribution. Consequently, the state of the system is the conditional distribution of the demand characterized by a parameter, which is updated in each period based on the partial observation of the demand at that time. Intuitively, if sales are equal to the inventory level, then

the IM knows that the demand exceeded sales and will adjust his beliefs about the demand accordingly. Conversely, if sales are less than the available inventory in a period, it is clear that they are equal to the demand. This intuition is captured via Bayesian updating of the IM's belief about the true demand, represented as the conditional distribution of demand. Thus, there is an evolution equation that maps one period's demand distribution to the next period's demand. This evolution is affected by the choice of the order quantity. It is shown that the myopic order quantity is less than the optimal order quantity.⁷ Subsequent works of the authors allow for inventory carry over from one period to the next and incorporates demand learning in an adaptive control framework.

Inventory models with no observation of sales. Bensoussan et al.³ assume that the IM does not observe sales; rather he observes only whether the inventory level is zero or nonzero in each period. They derive the existence of optimal policies in the resulting infinite-state-space control problem. Their paper is part of a greater effort to build a comprehensive theory of inventory control under partial observations. In related works, they study other inventory models with partial observations. In these papers, the dynamic programming equations are highly nonlinear. Using what is known as the unnormalized probability, the authors are able to obtain a Zakai-type equation for the evolution of the conditional distribution. While this transformation does not remove the infinite dimensionality, the linearity permits the proof of the existence and uniqueness of the solution in a number of important inventory control problems with partial observations. Of course, there remain numerical difficulties due to the infinite dimensionality of the state, and computational approximations still require development. Nevertheless, a sound theory is available.

Inventory models with delayed observation of sales. When partial observability arises from information delays in reporting sales, the current inventory level is not observed by the IM. Instead,

he observes the exact inventory level of a prior period. In such models when backorders are allowed, Bensoussan et al. are able to find a sufficient statistics and to show that base-stock and (s,S)-type policies are optimal.⁸

Inventory models with observation of sales transactions. Inventory record inaccuracy is a significant problem for retailers using automated inventory management systems. DeHoratius et al. explicitly account for the interaction between inventory level uncertainty and observations of sales transactions in a lost sales environment.⁶ They develop a model of a lost sales retail inventory system with record inaccuracies and observed sales, and assume that the retailer has uncertainty around the physical inventory available on the shelf, caused by factors such as theft and spoilage. The state of the system in such a model is represented by the inventory's conditional distribution, which they refer to as the Bayesian inventory record. The evolution of the state is based on the observation of the sales transactions. Intuitively, if visible sales (a censored observation of demand) are zero in a period, then a rational IM will realize that the lack of sales may be due to a physical stockout and adjust his beliefs accordingly. Conversely, if visible sales are positive in a period, then the IM knows that the previous physical inventory position could not have been zero. This intuition can be formalized through Bayesian updating of the IM's belief about the true inventory level, and the optimal policies based on the Bayesian inventory record for both replenishment and audit triggering can be obtained. However, computation of these policies is not a simple task, therefore, the authors seek practical heuristic policies that are easily implemented. Simulation shows that their policies consistently outperform commonly used policies that assume accurate records. Thus, their policies are capable of recouping much of the cost of inventory record inaccuracy, without implementation of inventory tracking technologies like RFID. Their replenishment policies avoid the problem of freezing and their audit

policy significantly outperforms the popular zero balance walk audit policy. They also present methods for estimating the necessary model parameters and calibrate their model based on real audit data from a leading retailer. Bensoussan et al. have developed a more general cash register model and focus on existence and uniqueness issues.⁹

Important Research Issues

There are many important empirical and theoretical research topics to pursue in the future.

Empirical research. It would be of much interest to know the industries where the problem of incomplete inventory information, or the i3 problem, is serious enough to warrant the difficult mathematical analysis required. Clearly, if the extent of accuracy in inventory information is not bad, then one could still use the classical inventory control approaches without too much sacrifice in profit.

It is now reasonably well documented that the i3 problem is serious in the retail industry. Could the food industry have spoilage problems significant enough to cause inaccurate inventory records? Which other industries are afflicted with significant inventory inaccuracies?

A related issue worth studying is whether or not the presence of inaccurate inventory records is recognized or simply brushed aside. After all, management may be reluctant to admit its presence for the fear of appearing to be negligent or incompetent.

In the case when the presence of the i3 problem is recognized, what signals are observed that may shed light on the inventory's conditional distribution? Keep in mind that even if the underlying inventory problem is the same and requires the same classical modeling, different signals may give rise to different i3 models worth analyzing.

Finally, how are the observed signals related to the inventory level? The answer to this question may come from historical records or in-depth statistical studies of the processes leading to deviations between recorded and actual inventories.

Such studies would enable us to specify the way in which the inventory's conditional probability evolves over time.

Theoretical research. Once we have a serious enough i3 problem, we need to develop a model involving the evolution of the conditional probability. The next step is to develop an optimization methodology for such partially observed problems. It has been more or less settled by Bensoussan et al. that the conditional probability is a sufficient statistic and that an optimal feedback solution exists for such problems.⁹ It is also clear from the reviewed literature that there are no simple optimal policies for such problems. There are at least two ways to address this issue. One way is to develop efficient computational procedures which would supply optimal solutions or near optimal solutions. In the later case, it would be important to know the extent of near optimality.

Another, perhaps more interesting way is to specify a class of simple implementable policies and optimize within this class. Of course, it would also be important to study the loss in the value function by restricting the class of optimal policies from the largest possible class of non-anticipative policies. These lines of research are largely unexplored at the moment.

An important benefit of solving i3 problems optimally is the provision of an economic justification for technologies such as RFID that may reduce inaccuracies in inventory observations. In some way, this research provides a three-pronged approach to prevent, correct, and integrate as mentioned in the introduction.

Concluding Remarks

In many real-life problems, inventories and demand are partially observed. For such problems, the classical inventory control approaches are no longer adequate and new approaches need to be developed. I've provided a brief review of the extant literature, which shows the difficult nature of partially observed inventory problems. I've also suggested important empirical and theoretical studies required to address the i3 problems.

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In the mid-1990s, the almost two-decade old Internet underwent a dramatic change with the creation and promotion of the World Wide Web (basically a set of linked hypertext documents accessed via the Internet). Prior to that time, many of us used the Internet to send email in one form or another. Today, the terms World Wide Web and Internet are used interchangeably, but that was not always the case. My first "home page" appeared in February 1995 when I created some text, scanned five photos, added four sounds, and created some external links, but I am not quite sure how many visitors I had to my website other than my students. This month's column is written by a WWW pioneer who created a website design firm. He shares with us his experiences and thoughts about the past and future of the Web.

[Kenneth E. Kendall, Feature Editor]

Browsers, Businesses, and Bandwidth: A Personal Journey down the Information Highway from the Beginnings of the World Wide Web to the Present

by Michael Mahfood, Managing Partner of Group M7

I called myself a graphic designer in the early 1990s, and it appears that by today's standards that moniker was quite a stretch. Back then, I was happy creating print advertising, sales flyers, and catalogs for my clients in the electronics industry. I was using software called Aldus (later Adobe®) PageMaker on a 9" ZEOS black and white notebook computer and thought: "All things considered, this was a cutting edge industry and I was cutting edge!"

We could not know where this would lead. We were, after all, using small compact computers for a living, looking very good doing so, and making a living as an added advantage!

The Early Days of the Web

So as stories go, one day in 1994, I was just minding my own business and a client in the Chicago area that was publishing *Barbie*—*The Mattel Barbie Magazine* asked me if I had heard of the World Wide Web yet. She said you could place an ad-type page there and potential clients would see it and maybe contact you. It was cheap and best of all, could be seen all over the country. I queried

her further. While her question caught me off guard, I didn't want to appear uninformed, so I just let her keep talking and tried to follow along. With hindsight, I now realize that she was talking about what we today take for granted, what today we now know as the single greatest informational tool since the printing press.

In the early days of the Web, some of us really didn't know whether the word or term was supposed to be *website* or *websight*. Both made sense, you saw it with your eyes, and it just did not naturally occur to me what was right. This prompted one of my earlier clients to say, "You know, Mahfood, two years ago you couldn't even spell Internet, and now you are in the business."

I quickly plunged headlong into the occupation of Web mastering. I was uniquely qualified, I told myself. After all, I had a computer, I knew how to use it, and my entire life before this point had taught me entrepreneurial skills by trial and error. Timing is everything, and time waits for no man.

In 1995 it was a matter of being in the Web business with a few websites to your credit to attract new business. After all, it



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seemed that most of the website designers were appropriately called that, until their mother called them to supper, and then it was homework and bedtime! Not the stiffest competition I have ever faced. In fact it was simple to attract new business. One customer got us another and so on.

We opened our website design firm in 1995 and called it Group M7. Our first semi-automated HTML language editor was a German product named HotDog. It was as primitive as they come by today's standards, but in 1994, not having to code HTML with a note pad was a real advantage. There was a tradeoff to be worked however. Even though there were not many websites, there was not much bandwidth either.

In the beginning of the browser-based Web those of us designing websites were forced to use bandwidth conservation techniques. We used small, condensed images; we rarely used backgrounds that were not generated by the viewer's computer; and we made every effort not to make the simple databases we employed too "heavy" to download with dial-up modem. Who of us has not been lulled to sleep to the sounds of two modems trying to mate over and over again . . . to no avail? But I digress. We did all this because the popularity of the Web was developing faster than the telecommunications industry could gear up their infrastructure. It was a bottleneck that was to last five long (and slow) years.

As in all good free market-based societies where there is demand, supply follows. Consider this: it took 38 years for AM radio to be in 50 million homes, and it took 13 years for 50 million of us to be eating our dinners in front of a black and white TV. But it only took 5 years for the browser-based Internet to be in 50 million U.S. homes, and that was in 1998 (Morgan Stanley report, 1997).

Creating Successful Online Businesses

The earlier client I mentioned, a kind and generous man named Michael Raley, owner of one of the oldest websites (built in 1994), is still on the Web today. His site www.racescanners.com allowed fans of

NASCAR and other racing franchises to locate particular radio frequencies and thus be able to listen to the conversation between the driver and his crew on their portable scanners. If the team decided to change the frequency they transmitted on, then racescanners.com would alert their clients through online and paper-based publications. It was sheer genius and a perfect application of the use of the Web. Mr. Raley did not stop there, he actually created a cottage industry by selling, via his on-line store, affinity products that race fans craved, and would be exposed to, every time they consulted his website for the newest frequencies. Sixteen years later Mr. Raley and I are still together, and both of us are happier for it.

Now looking back, it was obvious that there would be a rush to the Web. *The Web was not a magic pill for instant success in business.* The application would be the deciding factor. Some applications on the Web would work well, while others would not. It would resemble in some cases forcing a square peg through a round hole thinking and hoping that every business, every idea, and every concept would be better, sell better, sound, and look better on the Web.

As an entrepreneur with my share of failures equal to my share of successes, I can see that the ratio is no different on the Web than in *real life*. Over the course of history, brick and mortar businesses have always failed at a fairly stable rate. The Web created a new breed of business that have been dubbed *virtual businesses* and that opened a completely new level of business. Even though they seemed to take less capital to open, they nonetheless did not enjoy any more stability than traditional business start ups. The exception to the rule was (and probably will continue to be) an on-line business that could demonstrate that it was part of a well-established brick and mortar operation.

The Battle of the Browser

The popular browser-based World Wide Web came into existence in 1993, just 17 short years ago. It seems like we were never without it and all its trappings and many benefits. How in the world did we socialize without Facebook and

Twitter, how did we find anything without Google and Yahoo, and who were the whiz kids, many without a higher education, who came up with those crazy names anyway?

The history of mankind is made up of *defining moments*, sometimes errors, sometimes not, and the modern Web connected with a browser was no mistake. It will be said over and over again, in the ensuing years, with respect to how much and what kind of information has become available, we were simply in the Dark Ages before the post-1993 browser-based Web came into our lives.

The battle of the browser isn't about simply how to display information. It is all about how to control information. In contention are the biggest players, the Microsoft's Internet Explorer, Apple's Safari, Google's Chrome, and Mozilla's Firefox. Early on there was just Mosaic, then Netscape. Netscape officially gave up the ghost on March 1, 2008, and threw their support behind Firefox, AOL, and Flock. Did you ever wonder why none of them ever charged for their product? They wanted to lock your preferences into their product early on and then offer more revenue-based services tied into the browser.

People as users became fiercely loyal to one browser or another. The browser is thought to be the single most powerful tool in the entire arsenal of Web tools. Given the right set of circumstances and permissions, a browser can track the number one thing that the Web is built upon . . . information. That was true in the beginning and it is true today. The race is on and it will be a bitter and dangerous race to see who controls the most information in the next five years. Every single fact or piece of information, no matter how insignificant it may seem, is worth revenue to someone or some company.

Bandwidth Becomes King

By 2000 there was only one issue standing in the way of the Web having total media dominance and that was bandwidth. Without sufficient bandwidth a website would be no more than a static magazine advertisement. But with bandwidth, a website takes on life. For with bandwidth a website becomes interactive and could

be equal to or greater than broadcast television.

There is much pressure for governments to invest in infrastructure. More attention has been placed on access, but relatively little on bandwidth. Recently it was announced that the United States has awarded \$7.2 billion dollars in grants and loans to increase the broadband access to rural and low-income families (Reuters, 2010), and Finland has become the first nation to make broadband access a legal right of all of its citizens (QMI Agency, 2010).

Traditional broadcast media understands the growing bandwidth dilemma and is afraid for good reason. Let's look at the traditional evening newscast (airing at 6:00 PM here in Tyler, Texas, for example) on your local ABC affiliate. It takes about 12 rather well-paid folks to make it work. Three anchor persons, three camerapersons, one director, one producer, one news director, and at least three field reporters, at very least.

And even with that staff, the news when aired is typically at least two hours old. With a steady wireless connection and decent bandwidth, a smart fellow with a laptop equipped with free Skype can broadcast from the "scene" for about the price of a laptop and a monthly cell phone bill. He is now a one-man TV station communicating from anywhere, back to his

website, which can in turn be seen by the entire world that accesses the Web. Get it?

Radio broadcast belongs to the satellite industry now and there is no life left for paper publications. Traditional paper publications of any note at all reproduce themselves happily on the Web every day. Happily, I say? By publishing only on the Web they will have 85% fewer employees, no paper costs, a decent stream of advertising revenue, and *The New York Times* and others like it conceivably can be profitable entities once again.

Will the Future Ever Come?

For as long as I can remember, year after year, some technology reporter on television would state emphatically that this was the year for the video telephone. I never saw one that worked. Until Skype. I always heard there was going to be a way to get a letter on your letterhead across the country in seconds. I never saw it until email came around. For years, I was certain that someday soon we would be able to do lightening-fast calculations on some of the fastest computers in the world from our own desktop. It didn't happen until the broadband Web came to life. The future you ask? It's here; it's now and always will be.

In the Words of John M. Richardson, Jr., "When it comes to the future, there are three kinds of people: those who let it

happen, those who make it happen, and those who wonder what happened."

I like to think that those of us who started in the earliest days of the Web-based Internet made it happen to the delight and productivity of those of you who let it happen and the chagrin of those who wonder what happened. If we ever reach the future it will be a sad day for technology because technology is the sole vehicle that brought us this far.

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FEATURE, from page 15

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Introduction to the Center for Education on Social Responsibility

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Look inside the toolbox of a student at a typical business school and you will find conventional business decision-making tools such as market valuation, ROI calculation, profit/loss analysis, marketing strategy, etc. Business schools are “in the business” of imparting fundamental decision-making tools to their students. However, if these tools are taught in the absence of values, the implied charge to future business leaders is: “Go forth and make decisions on the basis of maximizing ROI, market valuation, market share and profit.” Is it any wonder that we see far too many headlines about exercise of poor judgment by business executives who appear to have a “win-at-all-costs” mentality? Turning our attention away from the headlines towards the everyday, we see far more cases of business people simply acting reflexively, unmindful of the full range of impacts of their business decisions.

Recognizing that application of values is essential to sound business decision making, the University of Colorado’s Leeds School of Business launches its students on a journey that few other business students are privileged to take. Leeds is unique among public schools in the country in its substantial and enduring commitment to the infusion of values throughout all years of the curriculum. Through the generosity and vision of the Leeds family (for whom the school is named), students have the benefit of the Center for Education on Social Responsibility (CESR). The Center oversees more than 9,000 credit hours of coursework, all geared to equip Leeds students with the tools they will need to meet the ethical and social challenges of a highly competitive, increasingly complex business world.

Curricular Offerings—Undergraduate

In both required and elective CESR courses, Leeds students study and discuss approaches to business that are concerned with more than just maintaining a positive bottom line. They explore the strategic advantage of sustainability and corporate social responsibility and, more generally, the necessity of thinking about values and ethics in business and in life.

From day one, students are encouraged to consider how personal values relate to business decisions. The required freshman course, “Introduction to Business,” infuses ethics and values into readings and lectures as students learn the basics of business. They see how the decisions and behavior of business leaders play out in the *Wall Street Journal* and other publications, which provide ample fodder for essays and assignments.

At the sophomore level, Leeds students take required courses in the foundations of their major. CESR encourages and offers support for the development of values-oriented materials in these required classes and provides counsel to faculty in any discipline who request such materials.

Approximately 800 students per year take CESR’s required junior-level course (“Business Applications of Social Responsibility”), which is a rigorous and challenging exploration of values and differing views of corporate social responsibility. This flagship CESR course is offered in small classes, allowing students to participate actively in class discussions, “give voice to their values,” and evaluate the role of business in society. Building on a solid foundation of ethical theory and a thorough understanding of societal consequences of the free market

and government intervention, students are asked to determine how real people in real businesses with real dilemmas should act. By evaluating the behavior of business in current case studies, students learn to make decisions based on their personal values and their own view of the role of business. They must also articulate the theory or reasoning behind their views, recognize the shortcomings of their stances, and defend their positions.

At the senior level, CESR assists business school divisions in the offering of capstone experiences, requiring students to examine their values as they consider complex issues within their major field of study . . . accounting, marketing, management, and finance. These capstone courses enable students to apply their personal values and decision-making frameworks to find solutions to some of the most common and troublesome ethical issues they will face in their chosen careers.

Hallmarks of all CESR-sponsored and developed classes, whether required or elective, are self-discovery, high levels of interaction among students and faculty, and challenging project or case-based learning. Curricular innovations include

up-to-date course materials and cases that demonstrate current applications of timeless issues.

Elective Undergraduate Courses

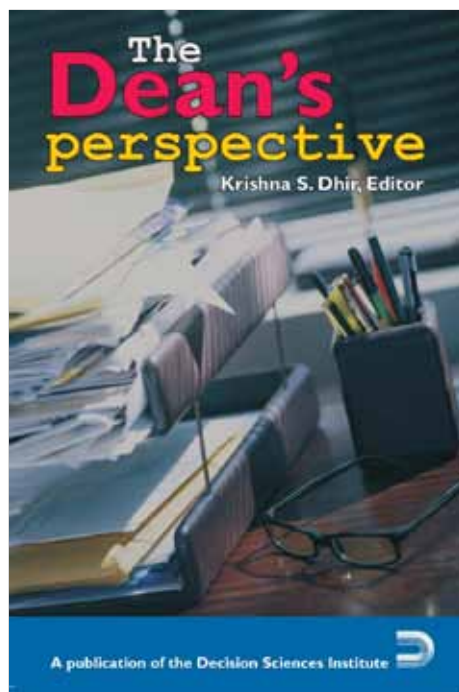
CESR is known for offering creative, out-of-the-box elective classes that address cutting-edge issues and challenge students to grow in their self-awareness, their experiences, and their understanding of corporate social responsibility.

In "Business Solutions to Global Poverty: Learning Through Service," upperclassmen work with Peace Corps volunteers and social entrepreneurs in the U.S. and in developing countries to gain hands-on experience and engage in focused academic research related to doing business and "doing good" at what is now called the "base of the pyramid," where 4 billion people who make under \$5/day remain outside the global market system. Acting in consulting teams, students provide business advice to help their project partners, who are working to address the needs of the poor and to solve global social and environmental problems around the world.

In "Sustainable Operations," students examine a number of business

dilemmas directly related to today's environmental challenges. This course allows students to learn from real-world businesses that are not only finding solutions to these challenges, but are extremely profitable in doing so!

"Leadership Challenges: Exercises in Moral Courage" is a year-long, highly selective course, based on an interactive model that creates a genuine dialogue between executives and students. Six high-level executives visit the classroom, share their experiences, and present an ethical dilemma, to which students present a solution for the executive to evaluate and critique. Donna Sockell, director of the Center for Education on Social Responsibility, created this demanding, yet highly popular course. She believes that having students interact with talented and successful executives who are willing to share real life stories they viewed as life-defining challenges in their careers will provide outstanding preparation for students to succeed when they assume business roles in the future. How often does an undergraduate student interact with executives such as Michael Francis, chief marketing officer for Target Corp.; Peter Burns, GM of Celestial Seasonings;



This book shares the perspectives and insights of an impressive array of current and former deans, as well as faculty members, about the role of a business school dean in all its dimensions. The book is appropriate for sitting deans as well as for aspiring deans, and is an important addition to the literature on business school leadership.

**Jerry E. Trapnell, Ph.D, CPA,
Executive Vice President &
Chief Accreditation Officer**

For more information, see
www.decisionsciences.org/publications



Mark Retzlaff, founder and CEO of Horizon Dairy, or Aaron Kennedy, the former CEO and founder of Noodles & Co.? Through this CESR course, students are not just passively listening to an executive's prepared speech; they are engaging in transformational dialogue and debate. According to one visiting executive, "I've had the opportunity to speak to hundreds of college students at numerous universities over the years as part of their curriculum. Leadership Challenges was by far the most relevant, engaging, and clever class I have experienced. The combination of student-professor-executive interaction, coupled with examples of real life drama and dilemmas, give students an incredible insider's view to the difficult decision-making that goes on every day in business." (Larissa Herda, CEO of tw telecom).

Real-life Experience

At Leeds, bringing the real life experiences of business leaders to students happens not only in the classroom setting, but through mentoring relationships as well. CESR spearheaded the Professional Mentorship Program, which connects upperclassmen with a business professional in their chosen field of study. The program impacts over 200 students each year and has brought a wealth of career advice, industry insight, networking skills, and internships to undergraduate students at Leeds.

MBA Program: A Focus on Responsibility, Entrepreneurship and Sustainability

At the graduate level, the required "Socially Responsible Enterprise" course engages all MBA students in a stakeholder-focused discussion of values and business obligations. This inter-disciplinary course encourages students to take stands on complex issues facing today's business leaders and has been very well received by Leeds graduate students.

In "Social Entrepreneurship in Emerging Markets," MBA students consult in teams to provide advice to social entrepreneurs in developing countries. After assessing the needs of the social en-

trepreneur, each team conducts research and develops a comprehensive report that will help its partner achieve his or her goals. Examples of recent projects include a business plan for ecotourism development for a coffee farming community in Honduras, a business plan for a social venture that will provide access to technology for university students and teachers in Rwanda, and a model for financial sustainability for a nonprofit that provides education for young entrepreneurs in Uganda.

"Topics in Sustainable Business" provides an overview of the core concepts, strategies, and practice of sustainable business, with an emphasis on entrepreneurial opportunities and development of a personalized sustainability action plan.

Certificates

Although *all* Leeds graduates will have been exposed by CESR to principles of corporate social responsibility and the practical applications of these principles, an increasing number of students seek more intensive study of this field. Leeds students now have the opportunity to pursue a Certificate in Socially Responsible Enterprise (SRE), one of the first certificate programs of its kind offered at the undergraduate level.

Certificate holders must complete coursework carefully selected from a cross-section of disciplines; demonstrate experiential learning in the form of an internship, independent study, or a pre-approved service-learning course or program; and present a personal statement of purpose, after reflecting on their unique educational experience. Students who complete the certificate will see and understand the social and environmental impacts of business and their ethical implications from a broader perspective. They will also graduate with practical knowledge and marketable experiences that will guide them in conducting business in an informed, responsible, and ethical manner.

Likewise, MBA students at Leeds are afforded a similar opportunity to distinguish themselves as excellent can-

didates in the growing field of corporate social and environmental responsibility. In collaboration with the Deming Center for Entrepreneurship and the Real Estate Center's Initiative for Sustainable Development, CESR offers the Sustainability Portfolio to MBAs who wish to focus their coursework and career goals on the critical field of sustainability.

CESR's Impact

Curricular programs are one thing; true student impact is another. How do graduates of the Leeds School of Business feel about the toolbox of decision-making skills provided through CESR? A few thoughts from Leeds undergraduate and MBA students . . .

The CESR program has proven to be the most valuable coursework of my college career, with its unique classroom interaction. By challenging my moral stand and the thought processes behind them, the Center has created an awareness of the ethical issues that I will be unable to ignore as I strive to become a future business leader.

—Eric Stout '09

Before I took this class I had a rather narrow view of what was good for the company and this was mostly based on financial measures. Recently I have used what I learned in this class for a capital proposal that was requested for the Health and Safety department's incident reporting management system.

—Joe Fricano, MBA

I feel the class has made a positive impact on the way I view ethics. Before, I had the viewpoint of—I would never be in that position—and now I realize it is all around. I find myself sharing concepts and stories discussed in class with senior management and peers.

—Eric Wuestefeld, MBA

How many minds do you have to change to make an impact? CESR believes that changing the mind of even one student will have a significant effect on that future leader's business and personal circles, rippling out to the commu-

nity at large. The Leeds School believes in the long-term impact of the CESR curriculum, considering that after just one semester of the junior-level course on "Business Applications of Social Responsibility," over 21.5% of students changed their evaluation of business conduct in ten scenarios, in favor of more "socially conscious" behavior. Moreover, students are becoming more selective about the businesses for which they will work, seeking a fit with their values.

Looking ahead, CESR strives to integrate this disciplined focus on values and social responsibility further into the basic fabric of the Leeds curriculum. In collaboration with functional divisions in the business school, multiple disciplines across the university and executives in the business community, CESR hopes to foster a generation of business professionals who are well-equipped to meet the ethical, environmental and social challenges of today's business world.

course helped me refine my thought process and gave me new platforms from which to think. I was wondering if I could get my final paper and test back at some point . . . I think that it will be a useful reference to me later in life. What I wrote on that test is a culmination of what I learned and thought about in your class this semester—and I was able to take the time to provide truly honest answers, answers to difficult questions that I would rather not forget.

—Rafael Pedicini '09 ■

There are plenty of jobs for warm bodies, but who really wants to be valued as a convenient replacement for a computer that doesn't exist yet. Knowing my values and pursuing work consistent with them was vital to my integrity and values are a foundation for my passion. Passion and integrity are always attractive to worthwhile employers. I got this job because of who I am as a person and that feels really good. The time I spent in your class helped me achieve greater clarity that helped me succeed in this way. I absolutely love that doing the right thing (being true to myself) is paying out huge! Thank you!

—Beau Mannering, '09

It [the course] genuinely made me re-think my stance on ethics and how they interact with business. I appreciate you opening my eyes. I feel that I am a better person and future manager for having taken this class.

—Chris Kozina, MBA

The concepts learned and discussed in this class are now a part of my conscious thinking and have changed how I will approach future decisions. I am better equipped to be a "trusted advisor."

—Jamie Regehr, MBA

I learned a lot about corporate social responsibility as well as what are the important questions to ask in difficult situations. Your

NAMES IN THE NEWS

CAROL LATTA, Executive Director, Decision Sciences Institute



Render



Heizer

Barry Render of Rollins College and Jay Heizer of Texas Lutheran University have recently opened an OM Blog for faculty teaching in the operations area. Combining their 75 years of teaching experience, the daily blog (at www.heizerrenderom.wordpress.com) includes teaching tips, classroom exercises, video ideas, guest blogs, and an "OM in the News" feature. The

latter collects articles from leading newspapers and magazines, summarizes them, suggests classroom discussion questions, and provides an on-line link to the article.

<http://www.heizerrenderom.wordpress.com>



Ken Boyer of Ohio State University was named the 2010 Distinguished Scholar by the operations management division at the 2010 Academy of Man-

agement meeting in August. The award recognizes "distinguished leaders in the field of operations management." Boyer was cited as an influential scholar with more than 40 published journal papers and for his leadership as co-editor of the *Journal of Operations Management*.

boyer.9@osu.edu ■

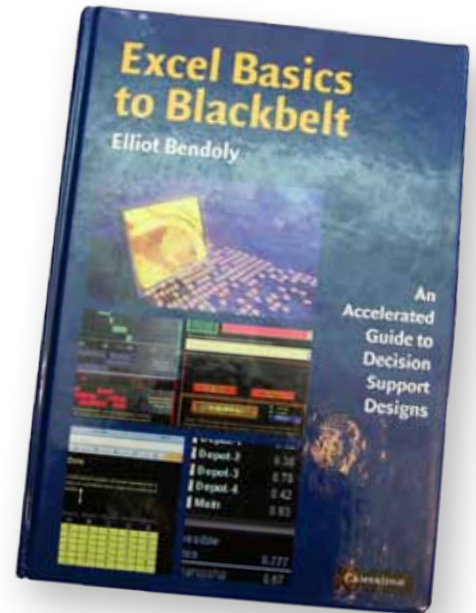
■ VIJAY R. KANNAN, Feature Editor, Utah State University

Book Review: *Excel Basics to Blackbelt—An Accelerated Guide to Decision Support Systems*

by Francis D. (Doug) Tuggle, Chapman University

Some books are meant to be read, while others are meant to be skimmed or to be kept on one's shelf as reference texts. Some books are meant for undergraduates, while others are for graduate students, doctoral students, executives, theoreticians, and/or practitioners. Some books invite you to scribble comments and rebuttals to the author in their margins. Some books, to paraphrase Groucho Marx, should not be put down; they should instead be thrown vigorously into the nearest fireplace. This book has a different use. I found it to be a book to be cradled in one's arms as one bangs away on a keyboard while at the same time referring to some new morsel described in the book. I have been teaching and using Excel (and some of its predecessors) for over a dozen years, and, while I am by no means a 'black belt' per the book's subtitle, I do not consider myself to be a basic user either. To contextualize my observations, I have an 800+ page reference book that I occasionally consult when I'm trying out some new to me feature of Excel. With this book, I learned something on many of its 300+ pages, and it has been useful learning.

The book starts slowly (but does not spend much time on the basics of decision support or the basics of Excel worksheets and workbooks) but quickly (page 24!) discusses 'add-ins.' These are convenient tools that are freely available but are not 'active' until the user specifies that they are to be added to the other Excel tools. Getting to the add-ins is well hidden in both Excel 2003 and Excel 2007. This book however shows how to acquire them in Excel 2007. A whole host of data analysis tools (e.g., ANOVA, correlations, histograms, moving averages, regression,



Excel Basics to Blackbelt—An Accelerated Guide to Decision Support Systems

Elliot Bendoly
Cambridge University Press
New York, 2008
vii + 333 pp.

etc.) as well as the linear programming system Solver are available by activating the add-ins. The book also makes reference to other add-ins, while having to be purchased separately, bring considerable additional functionality to Excel. Having to acquire these extra add-ins can be seen either as a huge imposition (by, for example, poverty-stricken students) or as a necessary condition for anyone who harbors illusions of becoming a 'black belt' (i.e., a proficient expert) at Excel. However, while you do not absolutely 'need' the extra add-ins to be 'good' at Excel, my view is that if you wish to be 'great' at Excel, you will need to step up your toolkit.



Francis D. (Doug) Tuggle

holds a B.S. degree from MIT and M.S. and Ph.D. degrees from Carnegie Mellon University. He is presently on the faculty at the Argyros School of Business and Economics at Chapman University, and is

a partner with Insight Consulting Partners, LLC. He has previously served as dean of the Argyros School at Chapman University, the Jones Graduate School of Management at Rice University, and the Kogod School of Business at American University. He has also held faculty appointments at the University of Kansas, and held tenured professorships in departments of business, psychology, and computer science. Professor Tuggle has written two books and more than 75 refereed journal articles. He consults broadly and sits on several corporate boards. A long-time student of processes, he is presently most interested in knowledge management, expert systems, decision support systems, and organizational cultures.

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In addition, the author has made available a number of example spreadsheets illustrating important concepts covered in the chapters. These can be found by going online to a specified url, clicking on the Data Analysis and Visualization icon, and clicking on the Library of Support Material. From there, reference is made to files for each of the 12 'content' chapters of the book. One chapter just has one file, but most have multiple files, and one has as many as seven. These files are extremely useful, educational, and entertaining, and I enjoyed simply playing with many of the files that the author provides.

The book has 13 chapters. In all but chapters one and ten, there are one or more practice problems at the end of the chapter for the reader to play with. Any motivated reader will quickly go beyond the given practice problems to play with the features discussed in the chapter (especially to play with the provided Excel spreadsheet files!). Chapter 2 covers the basics of Excel through conditional expressions. In a classroom of true Excel novices, one would have to backfill students' exposure to the features and uses of Excel and play with the basics, for example, absolute and relative addressing, creating charts, use of basic Excel functions, and use of Excel decisional tools (such as goal seeking, scenario analysis, data tables, etc.). My experience is that students, even those with experience with Excel, find it eye-opening to learn what Excel is capable of. The material on conditional expressions will probably require a separate class day if your students are anything like mine. The practice problems will sufficiently exercise the students' mastery of the material in the chapter.

Chapter 3 concerns itself with acquiring data instead of merely typing it in. The author shows how to import text files and data in tabular structures such as SPSS. However, the bulk of the chapter is devoted to explaining how to import and export Geographic Information System data between Excel and Microsoft's MapPoint software (it sells for about \$300, but is extremely useful). The author clearly shows how to import data from a website, and discusses random numbers and how to use them to create

distributions—uniform, triangular, normal, Bernoulli, and custom distributions. The chapter closes with an exposition on creating iterations (i.e., formulas that can be updated each time an iteration is run). Chapter 4 is concerned with different techniques for visualizing options in a decision problem. The chapter begins by distinguishing among objectives, decision variables, and constraints. It goes on to note the power of data visualization (the aphorism "a picture is worth a thousand words" is not quoted, but is certainly suggested). Bar charts, scatter plots, and 3-D surface plots are all covered. Pivot tables are also introduced to communicate how to filter and present data effectively. The chapter closes with a discussion of visualizing constraints.

Chapter 5 discusses data simplification issues stemming from George Box's famous quote that "all models are wrong, some models are useful." Effective heuristics are examined including the recognition heuristic, the nearest next heuristic, and a couple of project management heuristics. A discussion then ensues about using data consolidation in place of trying to decide which data to include and which to exclude. Various data consolidation approaches and various data grouping approaches are described that focus on how to execute them in Excel. The XL Stat add-in is also introduced in the context of data consolidation using XL Stat's principle components analysis tool; other uses of XL Stat are discussed in Chapter 12. The chapter also includes a supplement that explores how to make heuristics automatic.

Chapter 6 focuses upon optimization using the Solver add-in. Without mentioning linear programming or digressing into math (this is, after all, a book on using Excel!), the author illustrates the use of Solver through six examples, with each example gone into in a fair amount of depth (e.g., structuring the decision problem, obtaining a solution, graphing results, interpreting results, etc.). The examples span a nice range of problem domains, for example staffing, inventory, restaurant layout, and financial services. The four practice problems at the end of this chapter will further exercise the reader's knowledge of the use of Solver. Chapter 7 builds upon Chapter

6 and extends the discussion of optimization. The notion of local optima and global optima, separated by conditions of non-linearity and discontinuity, are illustrated and discussed. The travelling salesman/vehicle routing problem introduced in Chapter 5 (heuristics) is revisited, and the remainder of this chapter is devoted to the use of another tool, RISKOptimizer. The chapter illustrates how RISKOptimizer can be applied to a number of different decision problems (e.g., vehicle routing, clustering, and schedule development). A supplement to the chapter also examines genetic algorithms.

Chapter 8 moves one step closer to messy, real-world management problems by considering the effects of non-linear relationships and non-linear constraints using simulation. A flow chart illustrating the general approach to simulation is specified for two of the problems addressed in the previous chapter, the restaurant reservations problem and the inventory system problem. The author shows how the astute use of Excel's data table tool can facilitate the restaurant simulation. He also shows how to set up a macro to repeat a set of actions for the inventory system simulation model. An introduction to stochastic simulation is also presented. The chapter closes with an illustration of ActiveX controls "to add elements such as check boxes, option buttons, drop-down menus, and so on to their spreadsheets as alternatives to changing values in cells." The versatility and greater range of development options presented are useful for serious Excel aficionados. Although there are only two practice problems at the end of this chapter, they will exercise the user's ability to apply the tools discussed in the chapter.

Chapter 9 covers scenario generation and optimization. This chapter revisits the RISKOptimizer add-in to provide "a more in-depth and nuanced discussion of the various features of RISKOptimizer . . ." that addresses head-on the follow-up question: "How can we integrate the techniques associated with simulation and optimization in a single solid mechanism for meaningful decision support?" The chapter addresses optimization stopping conditions, simulation

stopping conditions, optimization of simulated variants, using averages from data tables in RISKOptimizer, optimization of system simulations, and using RISKOptimizer with calls to a reset macro and with calls to a recalculation macro. There is but one practice problem; more would have been beneficial. Chapter 10 deals with visualizing complex analytical dynamics. Random walks, frictionless boxes, and path-directed flows are all covered. The restaurant floor plan problem of Chapter 6 is revisited, visualized, and flows in the floor plan illustrated. This is the only advanced chapter where there are no explicit practice problems, but the six available spreadsheets available from the companion website are expected to serve as the basis for users to play independently and familiarize themselves with the range of possibilities.

Chapter 11 takes up the topic of developing and using Visual Basic (VB) and macros. In particular, it covers illustrations of code, checking for bugs, manipulating objects, syntax, variables and types, basic operators, date/time functionality, iteration structures, and user-defined functions. By the end, the reader will not be a VB expert but should know enough to get by. Although the author does not refer to this, there are many books on VB that will give the reader a high level of expertise and comfort in this domain. Chapter 12 looks at the process of automating calls to MS MapPoint, Solver, RISKOptimizer, and XL Stat software using VB. The inventory system simulation is revisited yet again. Chapter 13 brings the book to a conclusion, noting that by this point, the careful reader will have probably built up a pretty complicated decision model. A useful way a manager can confront the decision system and its results is by constructing a dashboard that summarizes and provides graphical insight into germane issues. VB subroutines to assist in the process are provided, described, and demonstrated. The book includes a glossary of key terms along with a chapter and section reference to where terms are used in the book. An appendix also provides a useful two page reference sheet regarding shortcuts and hot keys

(e.g., what happens when F6 is pressed twice? What does CTRL-5 do?). There is an index to names, important concepts, tools, software systems, etc.

So, does this book deliver on its promise of turning you into a 'black belt' Excel expert? Let me contextualize my answer: I have a friend who runs a successful firm that finds permanent and temporary employees for firms of all sizes who need a CFO, controller, or other accounting or finance professional. One of the distinct characteristics of this firm is that everyone they recommend goes through extensive Excel training, and the firm guarantees the expertise of each individual and provides all necessary support, further training, and Excel consulting to its clients. One of the reasons the firm does this is that it has discovered that expertly trained Excel users can shave many hours off of projects, in some cases literally dozens of hours. Given rates of pay and the ubiquity and recurrence of these projects, the time savings often add up to substantial sums of money to the client firms (I could comfortably retire on the amount just one firm has saved!). Will the Bendoly book produce such experts? No, expertise to this placement firm has a completely different meaning. For them, Excel expertise means the ability to structure finance/accounting projects quickly and the ability to devise Excel routines and macros so solutions are found quickly. There are other books that teach such Excel 'tricks.' The Bendoly book offers a completely different meaning of the word expertise—the ability to develop non-obvious, insightful, and useful business intelligence for a wide range of organizations. For that meaning of Excel expertise, the book succeeds. (One must be cautioned that although the book starts with the basics, it does not dwell on them, accelerating like a rocket to significant projects.) It is certainly suitable for an advanced graduate course in business intelligence modeling. It has earned a respected place on my bookshelf in as much as I am able to find it quickly and move it closer to my computer so I can readily refer to it as I develop my own business intelligence models. ■

Submitting articles to *Decision Line*

Members are invited to submit essays of about 2,000 to 2,500 words in length on topics of their interest, especially articles of concern to a broad, global audience. Please send essays (including brief bio and photo) to either the respective feature editor or to Editor Krishna Dhir.

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E-Commerce

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Joint Conference of the 15th Asia Pacific Decision Sciences Institute and the 4th International Conference on Operations and Supply Chain Management



LEFT: CUHK Conference Group with Michael Hui, Pro-Vice Chancellor of CUHK (front 6th left), DSI President Keong Leong (front 5th left), and Xiande Zhao, Vice Chair of Organizing Committee (front 5th right).

BOTTOM: Guangzhou Conference Group Photo

Around 250 scholars and practitioners, coming from Australia, Brazil, Canada, Cyprus, Hong Kong, Korea, India, Japan, Malaysia, Mainland China, Portugal, Taiwan, Thailand, Turkey, Sweden, U.K., U.S. and Vietnam shared their research findings and challenges on Innovation and Technology Management in Supply Chain at the APDSI and ICOSCM joint conference organized by the Supply Chain Management Research Center, Li & Fung Institute of Supply Chain Management & Logistics, CUHK; School of Business Administration, South China University of Technology; and Center for International Business Education and Research, Indiana University. From July 25 to 30, 2010, participants presented more than 190 papers in 30 concurrent sessions and 10 special invited sessions in Hong Kong and Guangzhou, and visited two leading manufacturers in Shunde.

The conference's mission was to provide a platform for academic researchers, industry practitioners, and government officials to share information and exchange ideas as to how to enhance

the global competitiveness of firms through supply chain collaborations, learning and subsequent improvement in innovative capabilities.

The opening remarks were addressed by Michael Hui, Pro-Vice Chancellor of CUHK and DSI President Keong Leong. Keynote industry speeches were delivered by honorable Dr. Victor Fung, chairman of Li & Fung Ltd; Dr. Manuel Costa, special assistant to CEO of ASTRI; Dr. Long Xu, president of China Mobile Guangdong, and Ran Xian, president of Guangzhou Echom Science & Technology Ltd. Renowned academics Kenneth Boyer, Jian Chen, Barbara Flynn, Cheryl

Gaimon, Soumen Ghosh, and Aleda Roth also made their insightful keynote speeches. You may go to the conference website at <http://lf-scml.baf.cuhk.edu.hk/icoscm/index.htm> to download more details. ■

The conference's best paper award went to "Social Capital and Buyer-Supplier Degree Symmetry: Impact on Relationship Satisfaction," co-authored by Judith M. Whipple, Kenneth K. Boyer and Evelyne Vanpoucke.



Managing Innovation in Supply Chains

Submission Deadline:
January 31, 2011

Focused Issue Co-Senior Editors

Barbara Flynn, Indiana University
Aleda Roth, Clemson University
Xiande Zhao, Chinese University of
Hong Kong

Motivation and Background

From an organizational perspective, innovation leads to the: (a) opening of a new market, (b) implementation of a new process, and/or (c) introduction of a new product. The impact innovations on single firm's activities and how they are managed has been extensively studied in the economics, business, and engineering literature. From a supply chain perspective, however, where the focus is on at least two firms/players, the applicability of the findings on managing innovations in a single firm is open to question. It is also relevant to note that the use of inte-

gration and collaboration mechanisms within supply chains could facilitate the successful introduction of innovations in such settings. Hence, it appears that there is an apparent need to focus our efforts on examining how innovations can be successfully implemented in supply chains, and this serves as the major motivation for this focused issue of DSJ.

Some specific areas of research interest for this issue are:

1. How is the process of managing product and process innovations in a supply chain impacted by:
 - a. Collaborative relationships
 - b. Technology integration
 - c. Information sharing
 - d. Learning effects
 - e. Government policies
 - f. Globalization

2. Is the process for managing innovations in a supply chain impacted by the type of innovation (i.e., market, product, or process related) being contemplated?
3. Are there significant differences between managing the innovation process in a service supply chain versus a product supply chain?
4. What is the total value to a supply chain of firm specific innovation activities?
5. Is there a need to develop incentive mechanisms for individual players in a supply chain which will enhance the likelihood of a successful adoption of an innovation?

MANAGING INNOVATION, see page 53

Social Computing, Operations, and Markets

Submission Deadline:
June 15, 2011

Focused Issue Co-Senior Editors

Ram Gopal, University of Connecticut
Prabhudev Konana, University of Texas
at Austin

Motivation and Background

New forms of social computing technologies for both business applications and social life have become ubiquitous. The terms social computing, Enterprise 2.0, Web 2.0, social networking, long tail, community sentiments, prediction markets, online word-of-mouth, Twitter, clouds, wikis, and avatars continue to overwhelm managers. While the above can provide immediate access to critical information, and potentially facilitate effective communication and decision-making capabilities, not much is understood as to how they influence

operations, improve financial measures, and alter markets in both services and manufacturing. The key advantage of social computing initiatives is the access to new forms of information such as search frequency (e.g., Google Trends) and community sentiments from social networks or message boards for decision making. Interesting research opportunities are evolving to tap into such new information sources to predict growth trends, revenue, market share, stock price, and customer satisfaction/dissatisfaction. For instance, time-series search frequency data from Google Trends can help firms predict demand which can be used to manage operations (e.g., inventory, production, and human resource planning) and drive supply chain efficiencies. Community sentiments from social networks such as Yahoo! Finance and MarketWatch can be potentially used by managers to better manage communi-

cation strategies and operations.

Despite the potential benefits of social computing technologies, there are obviously some issues of concern. While technology holds the potential to drive efficiency and lower risks, is there a darker side? For example, misinformation can spread easily and cause significant damage. Additionally, psychological biases are inherent in information available through these technologies and this in turn would impact the quality of managerial decisions.

The focus of this special issue is to explore and stimulate rigorous research on the interface between new forms of social computing and operational and financial

SOCIAL COMPUTING, see page 53

ANNOUNCEMENTS

(see more information on related conferences and publications at <http://www.decisionsciences.org>)

Institute Meetings

The 41st Annual Meeting of the Institute will be held November 20-23, 2010, at the San Diego Marriott Hotel and Marina in San Diego, California.

For more information, contact Program Chair Morgan Swink at M.swink@tcu.edu.

<http://www.decisionsciences.org/annualmeeting/>

The 42nd Annual Meeting of the Institute will be held November 19-22, 2011, at the Boston Marriott Copley Place Hotel in Boston, Massachusetts. Submission Deadlines: Refereed Papers & Competitions: April 1, 2011; Abstracts and Proposals: May 1, 2011. For more information, contact Program Chair Kenneth K. Boyer, Ohio State University, Fisher College of Business, (614) 292-4605, Boyer_9@fisher.osu.edu.

The Asia Pacific Region held its 2010 Annual Meeting jointly with the International Conference on Operations and Supply Chain Management in Hong Kong and Guangzhou in July 2010.

<http://lf-scml.baf.cuhk.edu.hk/icoscm>
<http://www.apdsi.org>

The European Region held its inaugural 2010 Annual Meeting on July 2-3, 2010, at the IESE Business School, University of Navarra, Barcelona, Spain. Contact Program Chair Marc Sachon at msachon@iese.edu.

<http://www.e-dsi.eu>

The 4th Annual Meeting of the Indian Subcontinent will be held at Management Development Institute, Gurgaon (Suburb of New Delhi), India, December 28-31, 2010. This also includes a special one-day conference/workshop on Design and Management of Services. The deadline for submission of papers has passed. In addition, if you wish to propose some special sessions, please contact one of the conference co-chairs: Professor B.S. Sahay, Management Development Institute, Gurgaon, India; Jatinder (Jeet) N.D. Gupta, University of Alabama in Huntsville, USA; Mark M. Davis, Bentley University, USA. For more de-

tails, contact Virender Kumar or N.S. Ganapathy Subramanian, ISDSI 2010 Conference Secretariat, Gurgaon, India, isdsi2010@mdi.ac.in, phone : + 91-124-4560000/4560002.

<http://www.mdi.ac.in/isdsi/cfp.htm>

The Mexico Region. For more information, contact Antonio Rios, Instituto Tecnológico de Monterrey, antonio.rios@itesm.mx.

The Midwest Region will hold its 2011 Annual Meeting on May 12-14, 2011, in Indianapolis, Indianapolis. The meeting will be at the Campus Center of IUPUI. The conference hotel is the Fairfield Inn and Suites. The submission deadline for papers is March 13, 2011. For more information, contact Program Chair Barb Flynn, Indiana University, bbflynn@indiana.edu.

<http://www.mwdsi2011.com/>
<http://www.pom.edu/mwdsi/>

The Northeast Region will hold its 2011 Annual Meeting on April 14-16, 2011, at the Montréal Marriott Château Champlain in Montréal, Canada. A fantastic gala dinner (as part of the registration fee) is scheduled for Saturday night at 6:00 pm to midnight. Deadline for paper submissions and special session proposals is December 1, 2010. For more information, contact Program Chair Minoo Tehrani, Roger Williams University, mtehrani@rwu.edu.

<http://www.neds11.org/>
<http://www.neds1.org/>

The Southeast Region will hold its 2011 Annual Meeting on February 23-25, 2011, at the Savannah Marriott Riverside in Savannah, Georgia. Deadline for paper submissions and special session proposals was September 27, 2010; students papers were due October 29, 2010. For more information, contact Program Chair George S. Lowry, Randolph-Macon College, glowry@rmc.edu.

http://www.seds1.org/2011_SE_DSI_Call_for_Papers.pdf

<http://www.seds1.org>

The Southwest Region will hold its 2011 Annual Meeting on March 9-12, 2011, at the Hyatt Regency in Houston, Texas. Deadline for paper submissions was October 1. For more information, contact Program Chair Carl M. Rebman, Jr., University of San Diego, carlr@sandiego.edu.

<http://www.swdsi.org>

The Western Region will hold its 2011 Annual Meeting on April 5-8, 2011, at the Embassy Suites-Downtown in the Historical Multnomah Hotel. Portland, Oregon. Deadline for paper submissions was October 29, 2010. For more information, contact Program Chair Sheldon R. Smith, Utah Valley University, WDSI2011@uvu.edu.

<http://www.wdsinet.org>

Call for Papers

Conferences

2011 International Conference of the Association of Global Management Studies will be held February 28 - March 1, 2011, at the Excalibur Hotel, Las Vegas, Nevada. Paper submission deadline is January 5, 2011.

<http://www.association-gms.org>

6th International Conference on Evolutionary Multi-Criteria Optimization will be held April 5-8, 2011, in Ouro Preto/MG, Brazil. A special MCDM Track will blend ideas from EMO and Multi-Criteria Decision Making. Papers on all aspects of multiobjective optimization and/or multicriteria decision making are invited for submission to the MCDM track, including those not related to evolutionary multiobjective optimization.

<http://www.mat.ufmg.br/emo2011/>

The Interdisciplinary Conference of AHLIST (Association of History, Literature, Science and Technology) will take place May 20-22, 2011, at the University of Houston. The conference theme is technology and future. Paper submission deadline is February 1, 2011.

<http://www.nebrija.es/~cmalagon/Mmedis/conferences.html>

ANNOUNCEMENTS, see page 52

2010 Program Chair's Message

MORGAN SWINK, Michigan State University



Greetings all! Here's hoping that you are all looking forward to the upcoming DSI annual conference with anticipation. I certainly am! Those of you who have been to San Di-

ego will surely agree with me that it is one of the nicest venues for a conference in the U.S. The Marriott Hotel and the surrounding areas offer many interesting adventures in dining, sight-seeing, and entertainment. Downtown San Diego offers a perfect combination of big city sophistication and small town warmth. The Gaslamp Quarter is a special place full of atmosphere and spectacles of all kinds. Please make time during your conference to enjoy these attractions with friends both old and new as you attend the conference.

Speaking of the conference, the theme this year is "innovation," and we have a few new things in store for you.

First, we will be debuting several new session formats aimed at increasing the quality and quantity of scholarly engagement.

Do you have a burning question or suggestion for a journal editor or one of the leaders in the Institute? If so, attend one of the "Speed Discussion Sessions," one with Journal Editors, and one with current and past leaders of DSI. In these sessions participants will be invited to sit at a table and have a discussion with an editor or DSI leader. Every 20 minutes, a signal bell will ring and audience participants will be invited to rotate tables. Thus, in the course of one session you will have a chance to sit and talk with all representatives.

Instead of just sitting and listening, do you want to have more opportunity to actively engage in research discussions? Almost half of the research sessions this year will be held in a new "interactive" format. Speakers will give shorter presentations to audiences or-

ganized in "horseshoe" shaped seating arrangements, thus creating more of a free-form discussion opportunity.

Do you sometimes have trouble deciding which sessions to attend? The program committee has done an outstanding job of developing and highlighting top quality sessions in their tracks. You will find that about one-quarter of the sessions this year are either "invited" or "featured" sessions. These sessions showcase some of the top scholars and most interesting research efforts submitted to the conference this year.

Are you in the market for new faculty? Check out the "New Talent Showcase" track, which is populated with sessions featuring new PhD. students who are on the market this year.

Are you looking for colleagues with similar research interests? Then be sure to attend the sessions included under one of three new special interest group tracks: (1) Innovation and Entrepreneurship, (2) HealthCare Decision Making and Policy, and (3) Project Management. Also check out the mini-conferences described in the following pages.

Second, in the spirit of innovation we can look forward to hearing from leading thinkers in two "all-institute" plenary sessions. **Wickham Skinner**, one of the recognized "fathers" of operations management research, will help us explore the question: *Has the Decision Sciences Profession Passed Its Peak?* This critical and provocative look at our field will stimulate innovative think regarding the current and future status of DSI. Bestselling author **Richard Schonberger**, a leading expert on process improvement, will offer his insights on the future of management initiatives and how the decision sciences can contribute to the development of innovations that have greater lasting power.

I hope you will agree that we all have a host of exciting and stimulating experiences awaiting us in San Diego. See you there! ■

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2010 Elwood S. Buffa Dissertation Award Competition Announces Winners

We are pleased to announce the winner and honorable mentions for the 2010 Elwood S. Buffa Dissertation Award Competition, co-sponsored by McGraw-Hill/Irwin and the Decision Sciences Institute. The purpose of the award is to encourage and publicize outstanding dissertation research by selecting and recognizing the best dissertations written during 2009 in the decision sciences.

The winner will receive a \$1,500 check and a plaque at the Decision Sciences Institute Annual Meeting in San Diego. The Honorable Mention Award-ees will each receive a plaque.

Twelve submissions were received and subjected to a two-stage review process. Each dissertation was reviewed by fifteen to eighteen eminent scholars in the first stage. This resulted in the selection of four finalists for further review. In the second round, twenty reviewers reviewed all four remaining dissertations. We thank all the reviewers who assisted in this process and congratulate the winners. In addition, all the authors who submitted their thesis should be proud of their efforts: the reviewers were highly complimentary of all the dissertations submitted.

Winner

Aravind Chandrasekaran, The Ohio State University

Multiple Levels of Ambidexterity in Managing the Innovation-Improvement Dilemma: Evidence from High Technology Organizations

Dissertation Advisor and Degree-granting Institution:

Kevin Linderman, Carlson School of Management, University of Minnesota

Honorable Mentions

(in alphabetical order)

Sungyong Choi, Rutgers Business School
Risk-Averse Newsvendor Models

Dissertation Advisor and Degree-granting Institution: Andrzej Ruszczyński, Rutgers Business School, The State University of New Jersey

Anant Mishra, George Mason University
Essays on Global Sourcing of Technology Projects

Dissertation Advisor and Degree-granting Institution: Kingshuk K. Sinha, Carlson School of Management, University of Minnesota

Antti Tenhiälä, IE Business School, Madrid, Spain

Contingency Theories of Order Management, Capacity Planning and Exception Processing in Complex Manufacturing Environments

Dissertation Advisor and Degree-granting Institution: Mikko Ketokivi, Helsinki University of Technology, Finland

Reviewers

Awaysheh, Amrou, Instituto de Empresa, Spain

Bendoly, Elliot, Emory University

Blackhurst, Jennifer, Iowa State University*

Boyer, Ken, Ohio State University

Braunscheidel, Michael, Canisius College, Buffalo

Bretthauer, Kurt, Indiana University

Chen, Rachel, University of California, Davis*

Choi, Thomas, Arizona State University

Craighead, Chris, Pennsylvania State University

Das, Sidhartha, George Mason University

Das-Smith, Sanjuktha, State University of New York, Buffalo*

Ellis, Scott, University of Kentucky

Forker, Laura, Univ. of Massachusetts, Dartmouth*

Frazier, Greg, University of Texas, Arlington

Grover, Varun, Clemson University

Guide, Jr., Daniel, Pennsylvania State University*

Hartley, Janet, Bowling Green State University*

Heineke, Janelle, Boston University*

Jayaram, Jayanth, University of South Carolina

Jayaraman, Vaidy, University of Miami*
Kaynak, Hayle, University of Texas Pan-American*

Klassen, Robert, University of Western Ontario, Canada

Kocabasoglu-Hillmer, Canan, City University of London, United Kingdom

Koufteros, Xenophon, Texas A&M University

Krause, Daniel, University of Victoria, Canada

Mahapatra, Santosh, Clarkson University*

Malhotra, Manoj, University of South Carolina

Massey, Anne, Indiana University

Menor, Larry, University of Western Ontario

Paulraj, Antony, University of North Florida*

Robinson, Powell, Texas A&M University

Rabinovich, Elliot, Arizona State University

Ram, Sudha, University of Arizona*

Shafer, Scott, Wake Forest University

Slomp, Jannes, University of Groningen, The Netherlands

Suresh, Nallan, State University of New York, Buffalo

Tatikonda, Mohan, Indiana University

Vakharia, Asoo, University of Florida, Gainesville

Van Donk, Dirk Pieter, University of Groningen, The Netherlands

Vokurka, Robert, Texas A&M University, Corpus Christi*

Wang, Xiaofang, Renmin University, Beijing, China

Webster, Scott, Syracuse University*

Wei, Jerry, University of Notre Dame

Xie, Jinxing, Tsinghua University, Beijing, China

Zhang, Peter, Georgia State University

**Served in both rounds of the evaluation process.*

Elwood S. Buffa Doctoral Dissertation Award Competition Coordinator

Nallan Suresh, University of Buffalo
ncsuresh@buffalo.edu

2010 Best Teaching Case Award Competition Finals

Two finalists cases for the DSI Best Teaching Case Award Competition [174-TC] have been determined. Authors of these cases will make pedagogical presentations to a panel of judges on Sunday, November 21, 10:30 a.m. - noon. All DSI attendees are welcome to attend this session.

Czech Mate: Jake and Dan's Marvelous Adventure (A+B)

Robert E. Collier (Darden School, University of Virginia), Mike Kadish (Darden School, University of Virginia), Elliot Weiss (Darden School, University of Virginia)

Two MBA students participating in a week-long kaizen event at a manufacturing

plant in the Czech Republic must achieve a 40% reduction in gross inventory and a 35% increase in productivity by Friday, despite an uncooperative work group. Lean manufacturing principles are analyzed in the context of a deadline-driven process.

Nokia India: Battery Recall Crisis

Charles Dhanaraj (Kelley School of Business, Indiana University), Monali M Malvankar (Ivey School of Business, University of Western Ontario), Narendar Sumukadas (University of Hartford), Fraser Johnson (Ivey School of Business, University of Western Ontario)

A seemingly routine product advisory by Nokia India triggered a tumultuous response in the Indian media, resulting in a panic among customers. Over 3 months,

the company had to recall and replace eight million faulty batteries. The case puts students in a position of an operations executive who must assess the company's response and prepare a recall protocol for the future.

Best Teaching Case Award Competition Coordinator

Rebecca Grant, University of Victoria

2010 Instructional Innovation Award Competition Announces Finalists

The Instructional Innovation Award Competition [139-II] seeks to recognize outstanding contributions that advance instructional approaches within the decision sciences. The focus of this award is innovation in college-or university-level teaching. Three finalists have been chosen to make presentations that will be held on Sunday, November 21, 10:00 a.m. - noon.

Use of an Online, Educational Novel in an Introductory Small-Business Management Class

Anne Maggs (Northwest Christian University), Timothy M. Bergquist (Northwest Christian University)

This paper presents the development of an online, student-centered, introductory small-business management class which uses an educational business novel, hypertext graphic design features, an interactive workbook, and a student-authored final chapter. Assignments were developed from a survey of 400+ students

enrolled in a simulation-based introductory business class and assessed through the use of a pre-and post-test.

The Case of Adult Education: Effectively Training Business Professionals

Kelley R. Johnston (Texas A & M University), Manoj Vanajakumari (Texas A&M University), Barry F. Lawrence (Texas A&M University), Senthil Gunasekaran (Texas A&M University), Pradip Krishnadevarajan (Texas A&M University), Maharajan Chidambaram (Texas A&M University)

We propose an innovative method for instructing industry professionals. This group presents some challenges to the instructor, which include time available for instruction and the educational level of the participants. Our four-fold methodology contains a case study, a spread sheet, a self-diagnosis test, and a test for implementation of the material learned. We show that our methodology is successful, the feedback is overwhelmingly positive, and the results are transferable to other institutions.

Puzzle-Based Learning: An Introduction to Critical Thinking and Problem Solving

Zbigniew Michalewicz (University of Adelaide), Nickolas Falkner (University of Adelaide), Raja Sooriamurthi (Carnegie Mellon)

Today's marketplace needs skilled graduates capable of solving real problems of innovation in a changing environment. Puzzle-Based Learning (PBL) is a new and emerging model of teaching critical thinking and problem-solving. We have run courses on PBL in Australia, United States, and Qatar in a range of class formats. Preliminary assessment indicates that the PBL approach is assisting students by providing a framework to explore critical thinking, as well as being fun and engaging.

Instructional Innovation Award Competition Coordinator

Chetan S. Sankar, Auburn University

Best Paper Awards

BEST APPLICATION RESEARCH PAPER

WINNER

Supply Chain Quality Integration: A Global Empirical Study

Baofeng Huo (Xi'an Jiaotong University),
Xiande Zhao (The Chinese University
of Hong Kong), Fujun Lai (University of
Southern Mississippi)

HONORABLE MENTION

*Advancing the Capability Based Planning Process
for Strategic Decision-Making within the
Canadian Forces*

Mark D. Rempel (Defence Research and
Development Canada)

BEST ENVIRONMENTAL ISSUES PAPER

WINNER

*Do as I Say Not as I Do—An Empirical
Examination of the Relationship between
Corporate Sustainability Beliefs and
Performance*

Sarv Devaraj (University of Notre Dame),
Suvrat Dhanorkar (University of Notre
Dame)

BEST INTERDISCIPLINARY RESEARCH PAPER

WINNER

*The Road to Maturity: Process Management and
Integration of Strategic Human Resource
Processes*

Matthew W. Ford (Northern Kentucky
University), James R. Evans (University
of Cincinnati), Suzanne S. Masterson
(University of Cincinnati)

HONORABLE MENTION

*Six Sigma Readiness Index (SSRI): A Tool to
Assess SMEs Preparedness for Six-Sigma*

Maneesh Kumar (Edinburgh Napier
University), Jiju Antony (University of
Strathclyde)

BEST THEORETICAL/EMPIRICAL RESEARCH PAPER

WINNER

*Successful Supply Chain Management Systems:
The Role of Individual, Network and
Collaborative Competencies*

Jane Barnes (Meredith College), Ying Liao
(Meredith College)

HONORABLE MENTION

*Measurement Invariance of Entrepreneurial
Investment Climate: A Cross-Country Scale
Development*

Dae-il Nam (The Pennsylvania State
University), Jonathan D. Arthurs
(Washington State University), John J. Sosik
(The Pennsylvania State University), John
Cullen (Amsterdam Business School)

BEST STUDENT PAPER

WINNER

*A Strategic Supply Chain Alignment Model:
The Influence of 3D Strategy Alignment on
Performance*

Oanh T.K. Tran (The University of Toledo),
David D. Dobrzykowski (University of
Toledo)

We gratefully acknowledge the Best Paper Awards Reviewers

Karen L. Brown, Missouri State University
James R. Evans, University of Cincinnati
Benito E. Flores, Texas A&M University
Lori S. Franz, University of Missouri-Columbia
Janelle Heineke, Boston University
James C. Hershauer, Arizona State University
Gary Holmes, Drury University
Ira Horowitz, University of Florida
Bill Perkins, Indiana University
Cliff Ragsdale, Virginia Tech
Albert J. Simone, Rochester Institute of
Technology
Marion G. Sobol, Southern Methodist
University
Linda G. Sprague, Rollins College
Suresh Tadisina, Southern Illinois University
Carbondale

Best Paper Awards Competition Coordinator

Corinne Karuppan, Missouri State
University

Distinguished Papers

Accounting and Finance

*Two Models of Virtual Transfer Pricing
Mechanisms in Global Supply Chain*

Kun Liao (Central Washington University),
Ke Ke (Central Washington University),
Eldon Johnson (Central Washington
University), Yan Wang (US Civilian
Research & Development Foundation)

*Can Projection Information Shed Light on Post
Bankruptcy Performance?*

Ben Branch (University of Massachusetts -
Amherst), Min Xu (University of Detroit
Mercy)

Innovative Education

*Does Online Participation Mediate the Effect of
Learning Style on Learning Performance?*

Eugenia Y. Huang (National Chengchi
University), Sheng Wei Lin (National
Applied Research Laboratories- Science
and Technology Policy and Information
Center), Travis K. Huang (National
Chengchi University)

Product/Process Innovation and Project Management

*Competitive Process Improvement: Linking
Internal and External Tensions*

Shu-Jung Sunny Yang (The University
of Melbourne), Yan Emma Liu (The
University of Melbourne)

2010 Doctoral Student Consortium

Creating successful career paths for students

Co-sponsored by McGraw-Hill/Irwin, Alpha Iota Delta, Emerald Group Publishing, and the Decision Sciences Institute

DSI's 28th annual Doctoral Student Consortium is an engaging, interactive professional experience designed to help participants successfully launch their academic careers. We are pleased to have the co-sponsorship of McGraw Hill/Irwin with contributions from Alpha Iota Delta and Beta Gamma Sigma for this important event. The Consortium will take place on Saturday, November 20, 2010, at the 2010 DSI Annual Meeting in San Diego.

Who Should Attend?

The Doctoral Consortium is offered to individuals who are at least into their second year of doctoral studies. The Consortium welcomes students from all subject areas within the decision sciences. A variety of students with backgrounds in operations management, management information systems, management science, strategy, organizational behavior, marketing, finance, accounting, and other areas will increase the vitality of the sessions. This year's program will focus on basic preparation for an academic career, job search issues, the interview process, research strategies, effective teaching, among others. Students who are interested in addressing these subjects in a participative, interactive way will enjoy and benefit from the Consortium.

Why Should You Attend?

1. Networking. Get to know some of the leading researchers and educators. Getting a job, finding collaborators, and gaining advantages in the career you are about to enter are all related to "who you know." This Consortium is your chance to meet some of the leading researchers and educators in the field.

2. Skill development. Learn from veterans. Excellent teaching and research require practical skills in addition to

content knowledge. Veterans will share their secrets to success.

3. Furthering your research. Engage with your peers and outstanding researchers. The research incubator will give you a chance to engage in a discussion of your research ideas with both your peers and outstanding researchers.

4. DSI exposure. The Consortium is a chance to "test-drive" DSI, learn about its people, its processes (such as placement services), and its opportunities.

5. Fun! Come socialize with your current and future colleagues in a city that has retained its sense of history and tradition, while carefully blending in cosmopolitan progress.

Program Content

The Doctoral Student Consortium involves seasoned, world-class research faculty from a variety of schools, junior faculty just beginning their careers, and key journal editors. All will help guide discussions in the following sessions.

Preparing NOW for an Academic Career. What can doctoral students do now to gain an advantage in the job market and lay the foundation for a successful academic career.

The Job Search Process. Should you target your job search on research-oriented schools? Teaching schools? Private? Public? What's the best way to market yourself? What is the proper format for your vita? This session will help participants answer these questions through insights drawn from a panel of faculty experts.

The Interview Process. Dos and Don'ts. How should you prepare for an initial interview or an invited on-campus interview? What questions should you ask? What can you expect? What factors should you consider when making a final decision?

Teaching Effectiveness. Professor Harvey Brightman, a DSI Fellow and past president, will return to the Doctoral Consortium for another post-retirement workshop. His sessions are simply not to be missed. Even experienced faculty members sit in on these dynamic and inspiring sessions.

Being a Professor. Professor Ira Horowitz, also a DSI Fellow and past president, will share his insight and secret for success as a professor in academia.

Information About Specific Research Areas. World-class research faculty from a variety of specific subject areas (e.g., supply chain management, MIS, educational research) will meet with students whose specific research area matches that of the faculty. This faculty 'mentor' will offer advice and guidance on appropriate journals, current popular topics of research, potential co-authors and suggestions for focusing on a specific research topic area.

Join Us

The Doctoral Student Consortium does more than prepare individual students, it creates a community of colleagues you'll know throughout your career. Please plan to attend the Consortium and also encourage your student colleagues to participate in this important program. Although many participants will be entering the job market for this year, others will appreciate the opportunity to get a better understanding of an academic career and how to approach the job market the following year.

Application Process

Students in all areas of the decision sciences are encouraged to apply for the DSI Doctoral Student Consortium. Those wishing to be included should submit:

A current curriculum vita, including contact information (e-mail in particular), your major field (accounting, finance, marketing, management, operations management, MIS, management science, strategy, and so on), the title of your dissertation proposal or the title of a current research paper.

Interested students are encouraged to apply early if they wish to ensure themselves space in the Consortium. Materials should be sent electronically to Doctoral Consortium Coordinators Sarv Devaraj or Rajiv Kohli.

Participants must pay the regular student DSI member registration fee of \$80 (or \$105 for non-DSI member student) for the annual meeting, but there will be no additional charge for

the Consortium. This fee includes the Consortium luncheon and reception on Saturday, the DSI luncheons on Sunday and Tuesday, and the CD-ROM of the conference proceedings. Although students will be responsible for all of their own travel and accommodation expenses, it is customary for participants' schools to provide monetary support for these purposes.

Consortium participants will be recognized in *Decision Line*, the Institute's news publication. They also receive special recognition in the placement system, special designation on their name badges, and an introduction to the larger DSI community at the breakfast and plenary session. ■

Doctoral Student Consortium Coordinators

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Doctoral Student Consortium Schedule

Continental Breakfast and Registration

Saturday, Nov. 20th, 2010, 7:30-8:00 a.m.

■ 2-DC: Featured Session: Insights into the Art of Teaching

Saturday, Nov. 20th, 2010, 8:00-9:10am

Session Facilitator: Sarv Devaraj (University of Notre Dame)

Harvey Brightman, Regents Professor Emeritus of Decision Sciences at Georgia State University, offers insights into the art of teaching. Dr. Brightman, the recipient of numerous teaching awards, currently offers workshops on teaching, and learning, at institutions around the world. His workshops enjoy wide appeal – from doctoral students to seasoned faculty.

■ 60-DC: Featured Session: The Interview Process—Dos and Don'ts

Saturday, Nov. 20th, 2010, 9:10-10:20

Session Facilitator: Sarv Devaraj (University of Notre Dame)

The interviewing process is that stage at which doctoral students are perhaps first viewed as new faculty members. Navigating this process can be daunting but also rewarding on many levels. Panelists offer a multitude of do's and don'ts for each stage of the interview

process, coupled with actual stories that provide lessons about interviewing. Panelists also suggest factors that should be considered when considering job offers.

■ 26-DC: Featured Session: Planning for a Successful Publication Record

Saturday, Nov. 20th, 2010, 10:50-noon

Session Facilitator: Sarv Devaraj (University of Notre Dame)

It's never too early for a doctoral student to begin preparing for a successful academic career. Writing a dissertation is, of course, one major element of that preparation. However, doctoral students may overlook other aspects of preparation that can potentially play a major role in launching a successful academic career. Panelists who include present and past editors of journals offer tips, insight, advice and personal experiences on what students can do, during all stages of their doctoral programs, to lay the foundation for an academic career.

■ 63-DC: Joint Luncheon with New Faculty Consortium

Saturday, Nov. 20th, 2010, noon-1:30pm

■ 70-DC: Featured Session: Conducting the Job Search

Saturday, Nov. 20th, 2010, 1:30-2:40pm

Session Facilitator: Sarv Devaraj (University of Notre Dame)

Conducting a job search is the beginning of the actual transition from graduate student to faculty member. How does one decide where to apply? What is the proper format and content of a vita? What materials should be submitted with the application? Panelists discuss these questions from a variety of perspectives.

■ 97-DC: Interactive Session: Individual Feedback on Vita

Saturday, Nov. 20th, 2010, 2:40-4:00pm

Session Facilitator: Sarv Devaraj (University of Notre Dame)

This session will provide doctoral students an opportunity to meet one-on-one with leading scholars in the field and get individual feedback on their vita.

■ 129-DC: Joint Reception with New Faculty Consortium

Saturday, Nov. 20th, 2010, 5:00-6:00pm

Doctoral Student Consortium Coordinators

Sarv Devaraj, University of Notre Dame
Rajiv Kohli, College of William & Mary

Curricular Issues Miniconference

The Decision Sciences Institute Curricular Issues Miniconference features diverse sessions that address broad curriculum issues, including assurance of learning, international opportunities for faculty and students, cutting-edge pedagogical research, and an overview of the strengths, weaknesses, challenges, and opportunities facing business schools. Sessions focused more on the classroom-level include hands-on demonstrations of techniques presented in recently published *Decision Sciences Journal of Innovative Education Teaching Briefs*.

■ 7-CI: Contributed Paper Session—Learning and Teaching Initiatives

Saturday, Nov. 20th, 2010, 8:30-10:00am

Session Facilitator: John Davies (Victoria University of Wellington)

- **The Management of Learning and Teaching Initiatives: A Systems Perspective**

Type: Refereed Research Paper

Authors/Presenters: John Davies (Victoria University of Wellington)

- **Eating the Elephant! Using Theory of Constraints for Assurance of Learning**

Type: Refereed Research Paper

Authors/Presenters: Victoria J. Mabin (Victoria University of Wellington)

- **Has Spreadsheet Software Been the Skeleton Key to Mathematical Modeling?**

Type: Refereed Research Paper

Authors/Presenters: Kathryn W. Ernstberger (Indiana University Southeast), M. A. Venkataramanan (Indiana University)

■ 34-CI: Contributed Paper Session: Initiatives about MBA Education and Enrollment Management

Saturday, Nov. 20th, 2010, 10:30-noon

Session Facilitator: Victoria J. Mabin (Victoria University of Wellington)

- **Using Major Field Tests to Assess the Effectiveness of an MBA Program**

Type: Refereed Research Paper

Authors/Presenters: Timothy M. Bergquist (Northwest Christian University)

- **Finding a Fit for Sustainability in Your MBA Program**

Type: Research Abstract

Authors/Presenters: Michael Maloni (Kennesaw State University), Shane Smith (Kennesaw State University)

- **Finding an Answer to the Enrollment Crisis in Computing: An ExPEDITe Project Case Study**

Type: Refereed Research Paper

Authors/Presenters: Rebecca Giorcelli (Fairmont State University), Cheon-Pyo Lee (Fairmont State University), Marjorie Darrah (West Virginia University)

■ 68-CI: Interactive Session: Teaching Initiatives in Different Disciplinary Areas

Saturday, Nov. 20th, 2010, 1:30-3:00pm

Session Facilitator: Shin-Yuan Hung (National Chung Cheng University)

- **Teaching System Requirements Elicitation Through a Case Study: A Staged Multimedia Approach**

Type: Research Abstract

Authors/Presenters: Anna Sidorova (University of North Texas), Thomas C. McGinnis (University of North Texas)

- **On-Line Accounting Degrees vs. Face-to-Face Accounting Degrees: Perceptions of CPA Firms**

Type: Research Abstract

Authors/Presenters: James M. Kohlmeyer III (East Carolina University), Larry P. Seese (Old Dominion University)

- **Designing a Healthcare Information Management Systems Curriculum**

Type: Research Abstract

Authors/Presenters: Hsin-Ginn Hwang (National Chung Cheng University), Ju-Ling Hsiao (Chia-Nan University of Pharmacy and Science), Kuang-Ming Kuo (National Chung Cheng University), Cho-Hsun Lu (National Chung Cheng University)

■ 69-CI: Featured Session: DSJIE Best Teaching Briefs

Saturday, Nov. 20th, 2010, 1:30-3:00pm

Session Facilitator: Susan K. Williams (Northern Arizona University)

- **Applying Sales and Operations Planning to the Metro-Atlanta Water Crisis**

Type: Award Competition Entry

Authors/Presenters: Michael Maloni (Kennesaw State University), Richard M. Franza (Kennesaw State University)

- **Using a Spreadsheet version of Deming's Funnel Experiment in OM Classes**

Type: Award Competition Entry

Authors/Presenters: Mark Hanna (Georgia Southern University)

- **The "Twenty Minute" Just-in-Time Exercise**

Type: Award Competition Entry

Authors/Presenters: Bryan Ashenbaum (Miami University)

■ 105-CI: Featured Session: DSJIE Best Empirical Papers

Saturday, Nov. 20th, 2010, 3:30-5:00pm

Session Facilitator: Ceyhun Ozgur (Valparaiso University)

- **An Exploratory Study of Student Perceptions of Which Classroom Policies are Fairest**

Type: Award Competition Entry

Authors/Presenters: Edward Duplaga (Winona State University), Marzie Astani (Winona State University)

- **Why Don't More Students Major in IS?**

Type: Award Competition Entry

Authors/Presenters: Mark G. Simkin (University of Nevada), William Kuechler (University of Nevada), Alexander McLeod (University of Nevada)

- **Absenteeism in Undergraduate Business Education: A Proposed Model and Exploratory Investigation**

Type: Award Competition Entry

Authors/Presenters: Lisa A. Burke (University of Tennessee at Chattanooga)

Curricular Issues Miniconference Coordinators

David C. Yen, Miami University
Shin Yuan Hung, National Chung Cheng University

Miniconference on Research in Hospitality Management

This miniconference examines emerging issues facing the hospitality industry, which is one of the fastest growing sectors worldwide. However, the current economic and political global climate means the industry has to deal with new challenges such as increased competition, declining revenues, and global terrorism.

■ 3-MR: Global Research in Hospitality and Tourism

Saturday, Nov. 20th, 2010, 8:00-9:00am

Session Facilitator: Melissa St. James (California State University-Dominguez Hills)

- **Hospitality and Human Resource Outsourcing: What to Source and What to Keep In-house**

Type: Research Abstract

Authors/Presenters: Thomas Norman (CSU Dominguez Hills)

- **Data Abstraction in a Tourism Decision Support System**

Type: Refereed Research Paper

Authors/Presenters: Putsadee Pornphol (Victoria University), Michael McGrath (Victoria University, Australia)

- **Exploring the Evolution of Technology Readiness: Focus on Techno-Ready Segments**

Type: Research Abstract

Authors/Presenters: Liana Victorino (University of Victoria), Kate Karniouchina (Chapman University), Rohit Verma (Cornell University)

■ 25-MR: Technology Issues in Tourism and Hospitality

Saturday, Nov. 20th, 2010, 9:00-10:00am

Session Facilitator: Cihan Cobanoglu (University of Delaware)

Participants: Natasa Christodoulidou (California State University Dominguez Hills), Ekaterina Berezina (University of Delaware), Cihan Cobanoglu (University of Delaware), Pradeep Racherla (West Texas A&M University), Daniel J. Connolly (University of Denver), Fezi Okumus (University of Central Florida)

■ 48-MR: The Success of Hospitality Programs in Schools of Business

Saturday, Nov. 20th, 2010, 10:30-noon

Session Facilitator: Natasa Christodoulidou (California State University Dominguez Hills)

Participants: Natasa Christodoulidou (California State University Dominguez Hills),

Cihan Cobanoglu (University of Delaware), Daniel J. Connolly (University of Denver), Lisa Marie Assante (School of Business, Southern Utah University), Kelly V. Phelan (Texas Tech University)

■ 88-MR: Workshop on Resources and Opportunities for Scholars Available from the Cornell Center for Hospitality Research

Saturday, Nov. 20th, 2010, 1:30-3:00pm

Session Facilitator: Thomas Norman (CSU Dominguez Hills)

Participants: Rohit Verma (Cornell University)

■ 119-MR: The Use of Cloud Services for Hospitality

Saturday, Nov. 20th, 2010, 3:30-5:00pm

Session Facilitator: Pearl Brewer (University of Nevada-Las Vegas)

Participants: Pearl Brewer (University of Nevada-Las Vegas)

Miniconference on Research in Hospitality Management Coordinators
G. Keong Leong, University of Nevada Las Vegas
Natasa Christodoulidou, California State University Dominguez Hills

Successful Grantsmanship Miniconference

Securing external research grants is a valuable experience, or even a necessary step, when our projects can be significantly enhanced by them. A day-long event, the Miniconference on Successful Grantsmanship is intended to help develop interests among DSI members in obtaining external research grants and to sharpen their skills to write grant proposals so that their endeavors may be more fruitful. The miniconference is co-sponsored by University of Detroit Mercy, College of Business Administration, Graduate Business Programs.

■ 28-SG: Creating a Plan and Understanding Funding Sources

Saturday, Nov. 20, 2010, 10:00-11:30 a.m.

Session Chair: Gregory W. Ulferts (University of Detroit Mercy)

Presenters: John M. Carfora, Associate Vice President for Research Advancement and Compliance, Loyola Marymount University
Leslie Gardner, Professor of Mathematics, University of Indianapolis
Annette Ketner, Sr. Director, Foundation Relations, University of San Diego
Leticia McCart, The Educational Resource Development Group
Traci Merrill, Assistant Director, Grant Manager, University of San Diego
Gregory W. Ulferts, Professor of Decision Sciences, University of Detroit Mercy

■ 65-SG: Government and Foundation/Corporation Writing

Saturday, Nov. 20, 2010, 1:00-2:30 p.m.

Session Chair: Gregory W. Ulferts (University of Detroit Mercy)

Presenters: John M. Carfora, Associate Vice President for Research Advancement and Compliance, Loyola Marymount University
Leslie Gardner, Professor of Mathematics, University of Indianapolis
Annette Ketner, Sr. Director, Foundation Relations, University of San Diego
Leticia McCart, The Educational Resource Development Group
Traci Merrill, Assistant Director, Grant Manager, University of San Diego
Gregory W. Ulferts, Professor of Decision Sciences, University of Detroit Mercy

GRANTSMANSHIP, see page 42

Miniconference on Global/International Research

The theme of the miniconference is to provide a forum for the discussion of the many issues influencing global strategy and network design such as country, social structure, politics, economics, human resources, supply chain management (services and manufacturing), foreign direct investment, and information technology.

■ 15-MG: Contributed Paper Session: Cultural and Human Resource Issues in Global Research

Saturday, Nov. 20th, 2010, 8:30-10:00am

- **Critical Issues on the Selection of Offshoring Managers**

Type: Refereed Research Paper

Authors/Presenters: Xiaolin Li (Towson University), Abey Kuruvilla (University of Wisconsin Parkside), Anastasia Kellogg (Diversey, Inc.)

- **Expatriate Adjustment: A Review**

Type: Refereed Research Paper

Authors/Presenters: Roger Brown (University of Texas, Pan American), Ankur Nandedkar (University of Texas, Pan American)

- **The Impact of Culture on the Relationship between Social Capital and Performance in the Buyer-Supplier Dyad**

Type: Research Abstract

Authors/Presenters: Sherry L. Avery (Univ. of Texas-Arlington), Edmund Prater (Univ. of Texas-Arlington), Patricia M. Swafford (Univ. of Texas-Arlington)

- **Expatriate Adjustment of Biculturalism and Intercultural Competences: Moderating Roles of Deep Cultural Adaptability and Acceptance**

Type: Research Abstract

Authors/Presenters: Molortuya Bodigerel (National Cheng Kung University), Wann-Yih Wu (National Cheng Kung University)

- **Hofstede's Uncertainty Avoidance Index and Some Implications**

Type: Research Abstract

Authors/Presenters: Abhay Shah (Colorado State University-Pueblo)

■ 43-MG: Contributed Paper Session: Internationalization—Process and Assessment

Saturday, Nov. 20th, 2010, 10:30-noon

- **Measuring the Extent of Internationalization of Firms: The Development of an Index**

Type: Refereed Research Paper

Authors/Presenters: Kamal Fatehi (Kennesaw State University), M. Sharifi (California State University, Fullerton)

- **Is it Possible to Reduce Risk Through International Operations?**

Type: Research Abstract

Authors/Presenters: B. Elango (Illinois State Univ.), Srinivas Talluri (Michigan State Univ.)

- **Does Democracy Impact FDI Inflow? Study of Countries in Sub-Sahara Africa**

Type: Refereed Research Paper

Authors/Presenters: Collins Emeka Okafor (Texas A&M International Univ.), Nacassius Ujah (Texas A&M International University), Aditya Limaye (Texas A&M International University), Ahmed Y Elkassabgi (Texas A&M International University)

- **Developing Country Efficiency Assessment by Means of a Comprehensive Model Based on Data Envelopment Analysis**

Type: Research Abstract

Authors/Presenters: Belal M.T. Abdelfattah (Univ. of Texas-El Paso), Jose H Ablanedo-Rosas (Univ. of Texas-El Paso), Leopoldo L. Gemoets (Univ. of Texas-El Paso)

■ 80-MG: Invited Session: Globalization's Impact on Meaningful Research—The Practitioner View

Saturday, Nov. 20th, 2010, 1:30-3:00pm

- **Globalization's Impact on Research: The Practitioner View**

Type: Invited Panel Discussion

Authors/Presenters: Stanley E. Fawcett (Brigham Young University)

■ 113-MG: Contributed Paper Session: Globalization's Regional Themes

Saturday, Nov. 20th, 2010, 3:30-5:00pm

- **The Arizona-Mexican Border: Analyzing Border Crossing Data and Reported Cyber-Crime Incidents Between 2001 and 2009**

Type: Refereed Research Paper

Authors/Presenters: Daniel Adrian Doss (University of West Alabama), Chengqi Guo (James Madison University)

- **Development of a Telemedicine Case Study Through US-India International Research Experience for Students**

Type: Refereed Research Paper

Authors/Presenters: April F. White (Auburn Univ.), Matthew Madisetty (Auburn Univ.), Varun Kaushal (Center for Development of Advanced Computing, Mohali, India), Sanjay Sood (CDAC-Mohali), J.S., Bhatia (CDAC-Mohali), Chetan S. Sankar (Auburn Univ.)

■ 157-MG: Invited Session: Globalization's Impact on Meaningful Research—The Academic Perspective

Sunday, Nov. 21st, 2010, 10:30-noon

- **Globalization's Impact on Meaningful Research: The Academic Perspective**

Type: Invited Panel Discussion

Authors/Presenters: Stanley E. Fawcett (Brigham Young University)

■ 193-MG: Interactive Session: Globalization Potpourri

Sunday, Nov. 21st, 2010, 1:30-3:00pm

- **Economic Development and Labor Availability in the Knowledge Industry: The Case of American Samoa**

Type: Research Abstract

Authors/Presenters: Michael E Valdez (Seton Hall University), Luafataalii Sa'iliemanu Lilomaiaava-Doktor (University of Hawaii - West Oahu), Robert H Doktor (University of Hawaii), Papali'i Avegalio Avegalio (Pacific Business Center Program), Luciano Minerbi (University of Hawaii)

GLOBAL/INTL RESEARCH, see next page

New Faculty Development Consortium

The New Faculty Development Consortium, co-sponsored by Alpha Iota Delta and Beta Gamma Sigma, is for faculty in the beginning of their careers who would like to learn more about teaching, research, publishing and other professional development issues. Attendance at this consortium is by application and is open to faculty members who have earned their doctoral degree and are in the first three years of their post-doctoral teaching career.

■ 1-NF: Continental Breakfast and Registration

Saturday, Nov. 20th, 2010, 7:30-8:00am

■ 4-NF: New Faculty Development Consortium Welcome

Saturday, Nov. 20th, 2010, 8:00-8:30am

Presenters: Gopesh Anand (University of Illinois at Urbana Champaign), Rohit Verma (Cornell University)

■ 18-NF: Building a Successful Academic Career: Insights for Promotion and Tenure

Saturday, Nov. 20th, 2010, 8:30-10:00am

Session Facilitator: Thomas Y. Choi (Arizona State University)

Authors/Presenters: Thomas Y. Choi (Arizona State University), Vallabh Sambamurthy (Michigan State University), Kathleen L. McFadden (Northern Illinois University), Praveen Pathak (Univ. of Florida), Johnny Rungtusanatham (University of Minnesota)

■ 49-NF: Developing a Productive Research Agenda: From Dissertation to Publications

Saturday, Nov. 20th, 2010, 10:30-noon

Session Facilitator: Jeff K. Stratman (University of Utah)

Authors/Presenters: Jeff K. Stratman (Univ. of Utah), Charles Corbett (UCLA Anderson School of Management), Roger Bohn (Univ of California, San Diego), Indranil R. Bardhan (Univ of Texas at Dallas), Keith Schwab (California Institute of Technology)

■ 64-NF: Luncheon (Joint with Doctoral Student Consortium)

Saturday, Nov. 20th, 2010, noon-1:30pm

■ 85-NF: Teaching Philosophies and Approaches: Proven Techniques, Dos and Don'ts

Saturday, Nov. 20th, 2010, 1:30-

3:00pm *Session Facilitator:* Gopesh Anand (University Of Illinois at Urbana Champaign)

Authors/Presenters: Mohan V. Tatikonda (Indiana University), Gregory R. Heim (Texas A&M University), Viswanath Venkatesh (University of Arkansas), Liana Victorino (University of Victoria), Ram Ganeshan (The College of William and Mary)

■ 117-NF: Professional Citizenship and Work-Life Balance

Saturday, Nov. 20th, 2010, 3:30-4:45pm

Session Facilitator: Jayanth M. Jayaram (University of South Carolina)

Presenters: Jayanth M. Jayaram (Univ of South Carolina), Richard Chase (University of Southern California), Rachna Shah (University of Minnesota), Lawrence D. Fredendall (Clemson University)

■ 128-NF: Closing Remarks

Saturday, Nov. 20th, 2010, 4:45-5:00pm

Presenters: Gopesh Anand (Univ. of Illinois at Urbana Champaign), Rohit Verma (Cornell University)

■ 130-NF: Reception (jointly with Doctoral Consortium)

Saturday, Nov. 20th, 2010, 5:00-6:00pm

■ 132-NF: Informal Dinner

Saturday, Nov. 20th, 2010, 6:30-9:00pm

New Faculty Development Consortium Coordinators

Rohit Verma, Cornell University
Gopesh Anand, University of Illinois at Urbana Champaign

GRANTSMANSHIP, from page 40

■ 96-SG: Moving from "Talk" to Successful Actions

Saturday, Nov. 20, 2010, 2:30-4:00 p.m. San Francisco

Session Chair: Gregory W. Ulferts (University of Detroit Mercy)

John M. Carfora, Associate Vice President for Research Advancement and Compliance, Loyola Marymount University
Leslie Gardner, Professor of Mathematics, University of Indianapolis
Annette Ketner, Sr. Director, Foundation Relations, University of San Diego
Leticia McCart, The Educational Resource Development Group
Traci Merrill, Assistant Director, Grant Manager, University of San Diego
Gregory W. Ulferts, Professor of Decision Sciences, University of Detroit Mercy

Miniconference on Successful Grantsmanship Coordinator

Gregory W. Ulferts, University of Detroit Mercy

GLOBAL/INTL RESEARCH, from previous page

• The Role of Exchange Rates in the Prices of Imports

Type: Research Abstract

Authors/Presenters: Mehdi Salehizadeh (San Diego State University), Fred Raafat (San Diego State University)

• Methodology to Streamline the Aerospace Cluster

Type: Research Abstract

Authors/Presenters: Antonio Rios-Ramirez (Monterrey Institute of Technology / University of Houston)

• Critical Success Factors for Virtual Shared Service Centers (VSSC)

Type: Research Abstract

Authors/Presenters: Eckhard Erling (European Business School), Gernot Kaiser (European Business School), Kai Worf (Henley Business School)

Miniconference on Global/International Research Coordinators

Anthony Ross, Michigan State University
Stan Fawcett, Brigham Young University

Miniconference on IT/SCM Interface

This miniconference focuses on research at the nexus of information technology and supply chain management, highlighting current and emerging trends in the area.

■ 44-MI: Invited Session: Impacts of Supply Chain Implementation

Saturday, Nov. 20th, 2010, 10:30-noon

Session Facilitator: Arun Rai (Georgia State University)

- **Impact of IT-enabled Supply Chain Process Change on Boundary Spanners' Job Outcomes, Process Performance, and Relationship Quality**

Type: Research Abstract

Authors/Presenters: Hillol Bala (Indiana University)

- **RFID Technology and Inventory Visibility in the Supply Chain: The Impact on Retail Store Execution**

Type: Research Abstract

Authors/Presenters: Bill Hardgrave (University of Arkansas), John Aloysius (University of Arkansas), Matthew A. Waller (University of Arkansas)

- **The Intersection of Supply Chain and Information Systems on Organizational and Partner Strategy and Performance**

Type: Research Abstract

Authors/Presenters: Cheryl Speier (Michigan State University)

■ 81-MI: Invited Session: Benefits of Supply Chain Implementations

Saturday, Nov. 20th, 2010, 1:30-3:00pm

Session Facilitator: Susan Brown (University of Arizona)

- **It's the Social Network Stupid: Fostering Supplier Liaison Success Following an ERP Module Implementation**

Type: Research Abstract

Authors/Presenters: Tracy A. Sykes (Australia National University)

- **Configurations of Information Technologies and Process Initiatives in Demand Management: How May Firms Enhance Agility Under Turbulent Environments**

Type: Research Abstract

Authors/Presenters: Pankaj Setia (University of Arkansas), Vallabh Sambamurthy (Michigan State University), David J. Closs (Michigan State University)

- **Net Benefit Appraisal of IT-enabled Innovation for Healthcare Service Operations**

Type: Research Abstract

Authors/Presenters: Arun Rai (Georgia State University), Mark Keil (Georgia State University)

■ 114-MI: Invited Session: Future Directions of Research at the Intersection of Information Technology and Operations Management

Saturday, Nov. 20th, 2010, 3:30-5:00pm

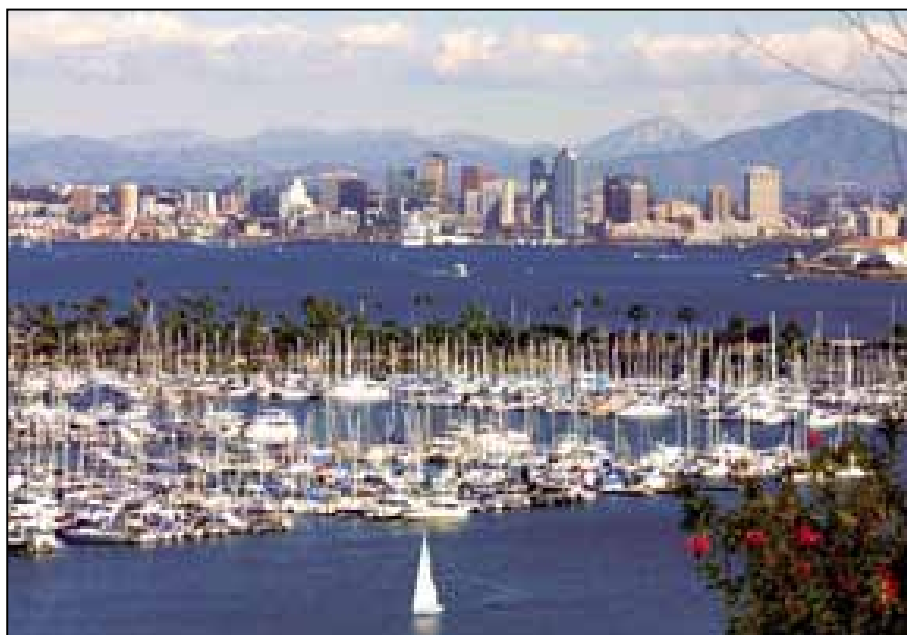
Session Facilitator: Viswanath Venkatesh (University of Arkansas)

Participants: Arun Rai (Georgia State University), Cheryl Speier (Michigan State University), Matthew A. Waller (University of Arkansas)

Miniconference on IT/SCM Interface Coordinators

Viswanath Venkatesh, University of Arkansas

Sue Brown, The University of Arizona



San Diego, the site of the 2010 DSI Annual Meeting, features a stunning skyline and fascinating neighborhoods such as the Gaslamp Quarter.

Miniconference on Making Statistics More Effective in Schools

The mission of Making Statistics More Effective in Schools and Business (MSMESB) is to improve the teaching and practice of statistics in schools and business. More specifically, MSMESB focuses on improving the teaching of statistics and statistical thinking, on cross-disciplinary research, on continuous improvement in business and education, and on interaction between academia and industry. We aim to encourage interaction between business faculty and others involved in teaching business statistics with professionals from industry and government, with publishers, and with software vendors.

■ 163-MS: Workshop: Using StatCrunch to Broaden the Horizons of an Introductory Business Statistics Course

Sunday, Nov. 21st, 2010, 10:30-noon

Session Facilitator: Kellie B. Keeling (University of Denver)

Presenter: Webster West (Texas A&M University)

■ 199-MS: Contributed Paper Session: Probability Models & Faculty Compliance for AACSB Assurance of Learning

Sunday, Nov. 21st, 2010, 1:30-3:00pm

Session Facilitator: John D. McKenzie, Jr. (Babson College)

• Descriptive and Inferential Assessment of Faculty Compliance in Addressing Mandated B-School Learning Goals

Type: Refereed Research Paper

Authors/Presenters: Mark L. Berenson (Montclair State University), Ore Fasehun (Montclair State University)

• Heads They Win, Tails We Lose

Type: Research Abstract

Authors/Presenters: Keith Ord (Georgetown University)

■ 235-MS: Interactive Session on Assurance of Learning: Incorporating Sound Statistical Practice into the Assessment Process

Sunday, Nov. 21st, 2010, 3:30-5:00pm

Session Facilitator: Mark L. Berenson (Montclair State University)

Presenters: Mark L. Berenson (Montclair State University), Hope M. Baker (Kennesaw State University), Keith Ord (Georgetown University), Barbara A. Price (Georgia Southern University), Noreen R. Sharpe (Georgetown University), Ronald E. Shiffler (Georgia Southern University)

■ 268-MS: Invited Session: What Statistical Skills are Needed for Business Analytics—A Dialogue with the Professionals

Monday, Nov. 22nd, 2010, 10:30-noon

Session Facilitator: Robert L. Andrews (Virginia Commonwealth University)

Presenters: Curt Hinrichs (JPM), Jerry Oglesby (SAS), Jing Shyr (SPSS)

■ 302-MS: Interactive Session: Selecting a Statistics Textbook (and its Supplements)

Monday, Nov. 22nd, 2010, 1:30-3:00pm

Session Facilitator: Keith Ord (Georgetown University)

Presenters: John D. McKenzie, Jr. (Babson College), Keith Ord (Georgetown University), Ken Kelley (University of Notre Dame)

■ 333-MS: Interactive Session: Teaching Statistics from a Business Problem-Solving Perspective

Monday, Nov. 22nd, 2010, 3:30-5:00pm

Session Facilitator: Robert L. Andrews (Virginia Commonwealth University)

Presenters: Richard D. De Veaux (Williams College), Robert A. Stine (Wharton School, Univ. Penn.), Shawndra Hill (Wharton School, Univ. Penn.)

Miniconference on Making Statistics More Effective in Schools and Business Coordinators

Robert Andrews, Virginia Commonwealth University
Keith Ord, Georgetown University
John McKenzie, Babson College

Tips for Doctoral Students—

Getting the Most from the DSI Annual Meeting

The Decision Sciences Institute Annual Meeting provides an opportunity for doctoral students to network, develop professional skills, interview for faculty positions—and have a good time!

For students who want to know how to get the most out of the Annual Meeting, see “Tips for Doctoral Students” on the DSI Web site at:

<http://www.decisionsciences.org/people/doctoral.asp>

See past *Decision Line* articles focusing on doctoral student issues at:

<http://www.decisionsciences.org/decisionline/col-doctoral.asp>

Professional and Faculty Development Program

The DSI Professional and Faculty Development Program is for Institute's members in all stages of their careers, with the goal of keeping them current in their fields. The content of the sessions offered is designed to provide insight into the challenges and opportunities in today's rapidly changing environment.

■ 20-PD Introduction to Latent Growth and Mixture Modeling Techniques Using SEM: Part 1

Saturday, Nov. 20, 2010, 8:30-10:00 a.m.

Session Chair: Xenophon Koufteros (Texas A&M University)

Presenter: George Marcoulides (California State University, Fullerton)

Modeling change within a structural equation modeling (SEM) framework is a relatively recent and popular approach for studying developmental and longitudinal trends. A variety of alternative names have been used to identify this approach, such as latent growth curve analysis. This workshop will provide an introduction to latent growth modeling strategies and models that can be used for the analysis of longitudinally obtained data. The works will include a "hands-on" computer component during which Mplus software package will be illustrated with various data examples. The workshop presumes some familiarity with the basic principles of factor analysis, but no familiarity with Mplus is assumed.

■ 51-PD Introduction to Latent Growth and Mixture Modeling Techniques Using SEM: Part 2

Saturday, Nov. 20, 2010, 10:30-noon

Session Chair: Xenophon Koufteros (Texas A&M University)

Presenter: George Marcoulides (California State University, Fullerton)

Continuation-Modeling change within a structural equation modeling (SEM) framework is a relatively recent and popular approach for studying developmental and longitudinal trends. A variety of alternative names have been used to identify this approach, such as latent growth curve analysis. This workshop will

provide an introduction to latent growth modeling strategies and models that can be used for the analysis of longitudinally obtained data. The works will include a "hands-on" computer component during which Mplus software package will be illustrated with various data examples. The workshop presumes some familiarity with the basic principles of factor analysis, but no familiarity with Mplus is assumed.

■ 89-PD Formative vs. Reflective Indicators

Saturday, Nov. 20, 2010, 1:30-3:00 p.m.

Session Chair: Xenophon Koufteros (Texas A&M University)

Presenter: Andrew Hardin (University of Nevada Las Vegas)

Causal indicators are now commonly used to formatively measure latent constructs despite continued debate about the appropriateness of their use. Recent research has suggested that the confusion regarding the appropriate use of formative measurement is due to a lack of theory supporting their use. This presentation will discuss current issues on the use of formative measurement with an emphasis on caution rather than on advocating its use. Examples will be presented to demonstrate the problems associated with determining whether a measure is formative or reflective based only upon an examination of the indicators. Alternative methods for utilizing causal indicators will also be discussed.

■ 120-PD Research Trends in Supply Chain Management

Saturday, Nov. 20, 2010, 3:30-5:00 p.m.

Session Chair: Shawnee K. Vickery (Michigan State University)

Presenters: Craig Carter (University of Nevada), Anthony D. Ross (Michigan State University), Funda Sahin (University of Tennessee)

Supply chain management, with roots in logistics, operations management, procurement and information technology, is continually evolving to encompass a broader perspective of organizational management. The panel will highlight traditional focus areas and provide projects for research trends in supply chain management.

■ 166-PD Research Trends in Management Information Systems

Sunday, Nov. 21, 2010, 10:30-noon

Session Chair: Subodha Kumar

Presenters: Reza Torkzadeh (University of Nevada, Las Vegas), Vallabh Sambamurthy (Michigan State University), Cheryl Speier (Michigan State University), Jerry Chang (University of Nevada Las Vegas)

Information technology is continually evolving creating opportunities and threats for many organizations. The panel will highlight traditional lines of research, discuss research trends, and provide directions for future research.

■ 202-PD Editor's Panel

Sunday, Nov. 21, 2010, 1:30-3:00 p.m.

Session Chair: Xenophon Koufteros (Texas A&M University)

Presenters: Kenneth Boyer (The Ohio State University), Craig Carter (University of Nevada), Vince Mabert (Indiana University), Aleda V. Roth (Clemson University), Asoo Vakharia (University of Florida)

■ 239-PD The Administrative Career Path

Sunday, Nov. 21, 2010, 3:30-5:00 p.m.

Session Chair: Funda Sahin (University of Tennessee)

Presenters: Janelle Heineke (Boston University), Reza Torkzadeh (University of Nevada, Las Vegas), Shawnee K. Vickery (Michigan State University), Timothy L. Smunt (Wake Forest University), Powell Robinson (Texas A&M University)

An academic career path may take unexpected turn into the darkside. This panel discusses the opportunities, motivations, challenges and rewards associated with an administrative career path.

Professional and Faculty Development Program Coordinators

Xenophon Koufteros, Texas A&M University
E. Powell Robinson, Texas A&M University

Technology in the Classroom Miniconference

The DSI Technology in the Classroom Miniconference is a forum for participants to share novel or innovative applications of technology in the classroom that enhance students' learning experience.

Thanks to the following sponsors—McGraw-Hill/Irwin, John Wiley & Sons, and Pearson Higher Education—we will have a hands-on lab with 30 laptops that can be used *to learn and do* with the Homework Managers and Application Software. So, *first come – first with a laptop!*

The 8:30am and 3:00pm sessions will offer opportunities to learn from colleagues who are using simulations, Excel and Solver in their courses to enhance learning.

The 10:30am and 1:30pm sessions will provide opportunities for the audience to learn about some of the leading homework managers and application software available for our use. You will be able *to see it and try it* if you are one of the lucky first 30!

■ 24-TN: Pedagogical Tools: Simulations and Solver-Enhanced Excel

Saturday, Nov. 20th, 2010, 8:30-10:00am

Session Facilitator: Samia M. Siha (Kennesaw State University)

• Using SimFlex in a Supply Chain Management Curriculum

Type: Research Abstract

Authors/Presenters: Arunachalam Narayanan (Texas A&M University), Prabhakar Thanikasalam (SimFlex Group, Flextronics)

• Better Exponential Curve Fitting Using Excel

Type: Research Abstract

Authors/Presenters: Michael R. Middleton (Decision Toolworks)

■ 57-TN: Homework Managers—Demonstrations by Faculty Users

Saturday, Nov. 20th, 2010, 10:30-noon

Session Facilitator: Robert L. Andrews (Virginia Commonwealth University)

- **McGraw-Hill's CONNECT** presented by Kevin Watson from Iowa State University.
- **MyStatLab** presented by Amy Phelps from Duquesne University
- **WileyPLUS** presented by Kevin Black from the University of Houston-Clear Lake and Franny Kelly from John Wiley & Sons, Inc.

■ 58-TN: Online Course Structure, Communication, and Effectiveness

Saturday, Nov. 20th, 2010, 10:30-noon

Session Facilitator: Binshan Lin (Louisiana State University-Shreveport)

• Communicating with Students: Automating Personalized Email and Attachments Using Microsoft Word, Excel, and Outlook

Type: Refereed Research Paper

Authors/Presenters: Bob McQuaid (Pepperdine University)

• Should Online Training be Used for Students with No Experience?

Type: Research Abstract

Authors/Presenters: Lakshmi Sankar (Troup County School System), Chetan S. Sankar (Auburn University)

• The Impact of Online Course Structure on Student Preference

Type: Research Abstract

Authors/Presenters: Tim P. Klaus (Texas A&M University-Corpus Christi)

■ 95-TN: Software to Enhance Analytical Skills—Demonstrations of Applications

Saturday, Nov. 20th, 2010, 1:30-3:00pm

Session Facilitator: Barbara A. Price (Georgia Southern University)

- **Frontline Solver** presented by Daniel H. Fylstra from Frontline Solver
- **JMP/SAS** presented by Brady Brady, Academic Ambassador for JMP and Jerry Oglesby, Director of SAS Global Academic Programs
- **StatCrunch** presented by Webster West from Texas A&M

■ 127-TN: New Capabilities in Excel 2010 and Office 2010

Saturday, Nov. 20th, 2010, 3:30-5:00pm

Presenters: Robert L. Andrews (Virginia Commonwealth University), Wilma M. Andrews (Virginia Commonwealth University), Daniel H. Fylstra (Frontline Systems Inc.)

Session will present an overview of several primary Microsoft improvements in the 2010 Office suite. For Excel, learn about new visual ways to filter data in Pivot Tables using slicers and other table enhancements, charting capacity enhancement for larger data sets, conditional formatting with new icons and data bar options, formulas that can now be typed into a Text Box, Sparklines (tiny charts that fit in a cell), new statistical functions, improved computational accuracy and greatly improved solver capabilities.

Special Thanks

Barbara Price, Technology in the Classroom Miniconference Coordinator, would like to thank the Decision Sciences Institute and the College of Business Administration at Georgia Southern University for their support in designing and developing a hands-on lab for the miniconference. Special thanks go to Joey Reeves, ITS Administrative Director at Georgia Southern, for his help in drafting the RFP and making the dream a reality.

Technology in the Classroom Miniconference Coordinator

Barbara Price, Georgia Southern University

Book your reservations early for the DSI conference hotel . . .

San Diego Marriott Hotel and Marina



The 2010 DSI Annual Meeting will be held at the San Diego Marriott Hotel and Marina. Offering spectacular waterfront settings in the heart of America's Finest City, the San Diego Marriott Hotel & Marina truly represents the best location for business and pleasure. It is conveniently located adjacent to the San Diego Convention Center and within walking distance to downtown San Diego and the Gaslamp District.

For reservations, please refer to the guidelines below. Note that check-in time is 4:00 pm of the day of arrival and check-out time is 12:00 pm, day of departure.

Group room rate reservations may be available based on occupancy of the hotel from November 17-26, 2010.

There are two ways to make reservations (hard-copy forms are no longer used*). Information and online registration is available at

<http://www.decisionsciences.org/Annualmeeting/travel/hotel.asp>

<https://resweb.passkey.com/go/decisionsciences>

Passkey's Phone Number:
800-266-9432

Hotel Room Types

- One king-size bed in room
- Double/double bed in one room

Single/Double occupancy

Cityview: \$177

Bayview: \$197

Triple occupancy

Cityview: \$197

Bayview: \$217

Reservations by Phone

When booking via phone on the Marriott Reservation line, please be sure to reference the "Decision Sciences Institute Meeting" in order to secure the special group room rates.

800-266-9432

To guarantee your reservations at the San Diego Marriott Hotel and Marina and to receive the special offered group rate, your reservations must be made by November 4, and you must supply a credit card with the expiration date avail-

able from the following list: Visa, Master Card, American Express, Discover, Diners Club.

Note that the Decision Sciences Institute special group rate may not be available if the group room block becomes full, or after October 31, which is the cut off date for making reservations to receive the special group rate.

If for some reason your plans change, you may cancel your reservation up and until 6pm of date of arrival. Should you not cancel your reservation, you will be billed for one night room charge and tax.

**At previous Decision Sciences Institute meetings, Marriott hotels have permitted attendees to reserve rooms by faxing or mailing a hard-copy form.*

Need a roommate? Doctoral students, faculty and business leaders are often looking for someone to share a room with during the annual meeting. For online assistance, fill out our roommate match form at the url below and submit your information to DSI:

<http://www.decisionsciences.org/annualmeeting/meetinginfo/roommates.asp>

San Diego Marriott® Hotel & Marina
333 West Harbor Drive
San Diego, California 92101 USA
Phone: 1-619-234-1500
Fax : 1-619-234-8678

2010 DSI Annual Meeting Website

www.decisionsciences.org/annualmeeting/

Job Placement Services

DSI Placement Services have a proven track record of bringing together job applicants and school representatives in the decision sciences. The online placement listings, which are now being accepted for 2010-11, are available to applicants and recruiters throughout the year. At the fall annual meeting, the Institute operates a placement service located conveniently near the conference registration area and exhibits that allows attendees to meet in an informal, yet public atmosphere.

Listing fees are a great value at \$350 for each position listed, \$25 for applicant listings, and no charge for student members. DSI membership must be current for all applicants (membership is not required for submitting a position listing).

Most new listings are received prior to the Decision Sciences Institute's Annual Meeting. At the conference, those who list with us are entitled to use the placement services, including the message center. Reserved interview tables are also available to recruiters at a \$200 fee for the entire conference.

Notes to Using the Upgraded System

The placement services options are available in the normal placement systems website: <http://www.decisionsciences.org/placement>. You will see a paragraph starting with a red NEW!—and the link below it (saying “more...”) will take you to the new placement services page.

There are three options under “View DSI Job Placement Listings”: search for positions, search for applicants, and advanced options. In addition, at the bottom of all the new pages, you will find a link saying “Send feedback/Report problems.” Any time something seems to not work or malfunction, please use this link to send us a problem report. The more reports we get from you, the faster

we can get all the issues taken care of.

The search form is designed such that you do not need to flip back and forth between the search and the result screens to change any criteria. The search results show up directly underneath the form. You can switch between the brief and detailed views, as well as change the sort order without having to re-post the search. You can also view your results page by page instead of scrolling through all the results using the “Allow Paging” checkbox. Want to print the results but don’t want to see the form? No problem! Just click on the “Hide form” link above the form, and you will be able to print the search results without any forms.

Some of the functionalities of the placement system include contrasted checkbook-style outputs to make result browsing easier on the eye, paging and quick sorting. In addition, to preserve privacy of our patrons, email addresses of employer contacts or applicants are not displayed in the public viewing mode. To see the email addresses, you must register and log in with your user ID and password.

If you select the “Advanced options,” or follow the link under the “Add/Change Listings” in the home page, you will get to the new login screen. If you are registered already, even if it is from last year, you can log in using your previous credentials, or register yourself as a new applicant or employer. Remember though, the database is cleared every May, so while you will be able to log in, your information will need to be re-entered. That is the way we ensure that all the information is current. The login screen will allow you to retrieve your password if you do not remember it. Once you authenticate, you will get into a context-sensitive menu, depending on your level of access. If you are an applicant, you will be able to do standard searches, as well as edit your information. If you are an employer,

you can add more positions under your account, and edit/delete your existing position listings.

As always, we appreciate your support and welcome your comments and questions regarding this service. Every page has a “Send Feedback/Report Problems” link at the bottom that you can use to send any issues with the system to the developers, and we will definitely take a look at it as soon as possible.

Helpful Tips

1. If paying by credit card online, please have the information ready. Payment by check will also be accepted, although it may delay your listing. The address for mailing payments is shown on the website.
2. Be sure to record your password for future use. If you do not remember your password, DSI can send it to your login email address upon request through a link on the login screen.
3. If you would like to link to your web presence elsewhere, have the URL ready. If you do not have a web presence, you might want to look into setting one up with your university, ISP, or websites such as www.dice.com or geocities.com. If a URL for your web presence is not yet available, it can be added to your listing later.

Questions and suggestions should be directed to:

Arijit Sengupta
Wright State University
271 Rike Hall
3640 Colonial Glenn Highway
Dayton, OH 45435
voice: (937) 775-2115
fax: (937) 775-3533
mobile: (574) 210-8084
e-mail: arijit.sengupta@wright.edu

Special Thanks to 2010 Track Chairs

2010 Discipline-based Tracks

Accounting: Assurance and Public Accountability

Robert Hutchinson, University of Detroit-Mercy, hutchirl@udmercy.edu

Information Systems Economics

Debabrata Dey, University of Washington, ddey@uw.edu

Vidyanand (VC) Choudhary, University of California Irvine, veecee@uci.edu

Information Systems Strategy and Design

Jeff Stratman, The University of Utah, jeff.stratman@business.utah.edu

T. Ravichandran, Rensselaer Polytechnic Institute, ravit@rpi.edu

Hospitality Management

G. Keong Leong, University of Nevada Las Vegas

Keong.Leong@unlv.edu

Natasa Christodoulidou, California State University Dominguez Hills
nchristodoulidou@csudh.edu

Logistics, Distribution, and Order Management

DaeSoo Kim, Korea University, kimd@korea.ac.kr

Marketing and Management Strategy and Policy

Derrick D'Souza, University of North Texas, dsouza@unt.edu

Manufacturing Operations Management

Jan Olhager, Linköping University, jan.olhager@liu.se

Martin Rudberg, Linköping University, martin.rudberg@liu.se

Organizational Behavior/Organizational Theory

Mike Lewis, University of Bath, M.A.Lewis@bath.ac.uk

Service Operations Management

Larry Menor, The University of Western Ontario

Supply Management

Tom Choi, Arizona State University, thomas.choi@asu.edu

Murat Kristal, York University, mkristal@schulich.yorku.ca

2010 Topical/Interdisciplinary Tracks

Cross-functional Interfaces (Marketing/OM/Finance/IS/Accounting)

Elliot Bendoly, Emory University, elliot_bendoly@bus.emory.edu

Decision Making and Problem Solving (MS/OR/Statistics)

Shaw K. Chen, University of Rhode Island, chenshaw@uri.edu

Product/Process Innovation and Project Management

Mohan Tatikonda, Indiana University, tatikond@iu.edu

Process Quality and Productivity Management

Matthias Holweg, University of Cambridge, m.holweg@jbs.cam.ac.uk

Risk Analysis and Crisis Management

Kathy Steckle, The University of Texas at Dallas, ksteckle@utdallas.edu

Thomas Schmitt, University of Washington, glennsch@u.washington.edu

Sanjay Kumar, The Pennsylvania State University, sxk89@psu.edu

Social Responsibility, Ethics, and Sustainability

R.D. (Robert) Klassen, The University of Western Ontario, rklassen@ivey.uwo.ca

2010 Special Tracks

Fellows Track

Sang Lee, University of Nebraska-Lincoln, slee1@unl.edu

Innovative Education

David Chou, Eastern Michigan University, david.chou@emich.edu

New Talent Showcase - Student Presentations

Susan Meyer-Goldstein, The University of Minnesota, meyer033@umn.edu

2010 Special Interest Groups

Innovation and Entrepreneurship

Roger Calantone, Michigan State University, rogercal@msu.edu

Healthcare Decision-Making and Policy

Rachna Shah, University of Minnesota, shahx024@umn.edu

Susan Meyer-Goldstein, The University of Minnesota, meyer033@umn.edu

Project Management

Gary Klein, University of Colorado at Colorado Springs, gklein@uccs.edu



San Diego, the site of the 2010 DSI Annual Meeting, features a stunning skyline and . . .



. . . fascinating neighborhoods such as the Gaslamp Quarter.

Conference of Operations and Supply Chain Management. The joint meeting was very well attended with 190 papers in 31 concurrent sessions and 10 special invited sessions in Hong Kong and Guangzhou. The first part of the meeting was held in Hong Kong. The second and third part was in Shunde and Guangzhou in China. Xiande Zhao, the co-chair of the international program committee, did a fantastic job putting together a meeting that involved many invited faculty from the U.S. and industry speakers from Hong Kong and China. For example, one of the speakers was Victor Fung, president of Li & Fung Limited. We also visited several factories including Li & Fung in Hong Kong and Galanz in Shunde. The Shunde Galanz Microwave Oven Electrical Appliance Company is the largest manufacturer of microwave ovens in the world, with a market share of about 45 percent. The combination of research presentations, invited speakers, and plant visits provided a rich experience for the participants.

The latest addition to the Institute's family is the Indian Sub-Continent region (ISDSI). Jeet Gupta has been instrumental in getting that region off the ground and helping with the organization of the first annual meeting in January 2008 in Ghaziabad, near New Delhi, in India. This year the fourth meeting of ISDSI will be held towards the end of December in New Delhi. I am looking forward to the meeting. China and India are the two countries with the largest population and will present growth potential for

the Institute. We are fortunate to be well positioned to take advantage of future opportunities in this vibrant part of the world.

Next year, the 11th International DSI Meeting will be held jointly with the 16th APDSI Annual Meeting in Taipei, Taiwan, in the summer. Joint meetings have proven to draw larger attendance. To that end the Institute's ad hoc committee has been charged with the task of developing a plan for organizing the first World Congress, which will involve collaboration with other international societies and organizations. Interactions among colleagues across boundaries and cultures holds promise of opening up a vast new spectrum of agenda for research, be it theoretical, empirical or pedagogical. Our members can look forward to the excitement and vigor that is derived from an active engagement in the globalized market of ideas. To that end, our Institute is working hard at creating opportunities for our members. Ultimately the success of the Institute's initiatives will depend on our members.

The Institute's annual meeting will be held in San Diego. Program Chair Morgan Swink and his organizing committee have been working diligently to put together a quality conference. We are excited that Morgan has invited two renowned speakers for the All Institute Plenary sessions. Wickham Skinner, one of the recognized "fathers" of operations strategy, will offer his insights on whether the decision sciences profession has

passed its peak and discuss new ways for us to step up our contribution to society. Well known author, Richard Schonberger, will present interesting findings from his global leanness study and present several approaches that organizations can take to neutralize major impediments to rapid response and process excellence throughout the value chain. We are also inviting increased industry participation at our meeting. For example, in the Hospitality Management Miniconference, executives from Microsoft and Cenium will host a panel to discuss the use of Cloud or Hosted Services for hospitality management, including Customer Relationship Management, Unified Communication and Line of Business applications such as Property Management System. For the first time, an exciting new format involving audience participation will be introduced at the meeting. Two "Speed Discussion" sessions have been organized: one involving journal editors, and the other involving current and past leaders of the Institute. Participants from the audience will be invited to engage in a discussion with journal editors or Institute leaders at any of the four tables set up for each session. Every 20 minutes, a signal bell will ring and the participants will rotate to another table for more discussion. Thus, at the end of the session, each participant will have a chance to sit and talk with all the editors or Institute leaders. If you have any innovative ideas to enhance our meetings please let me know.

See you all in lovely San Diego. ■

GUPTA VISION STATEMENT, from page 4

- Enhance the quality, participation, and reputation of our national and international conferences so that people want to participate in these as their preferred choice.

Finally, on a personal note, I am privileged, honored and humbled to be nominated for the DSI President-Elect position. I believe my long-term participation and service in DSI has produced benefits for our society (like the forma-

tion of the Indian Subcontinent Region). Through each of DSI activities, I found an opportunity to grow and create value for myself and my colleagues. While I do not claim to know all that it takes to transform an organization like DSI, I pledge my strong commitment to furthering the DSI core values, and to achieving its vision in a collaborative, inclusive, global, and service-oriented manner. Working together, as one team and one family, we

can ensure that DSI will continue to be the global society of first choice among decision science colleagues around the world.

Jeet Gupta is Professor and Eminent Scholar, College of Business Administration, University of Alabama in Huntsville. [guptaj@uah.edu]

■ INDIANA UNIVERSITY

Kelley School of Business Operations & Decision Technologies Department, Operations and Supply Chain Management Visiting Faculty Openings

The Operations and Decision Technologies Department of the Kelley School of Business invites applicants for clinical faculty positions to begin in Fall 2011. A terminal degree with a strong record or promise in teaching is required.

The major teaching responsibilities involve Operations and Supply Chain Management with a special emphasis in the Logistics area. An interest in teaching Data Analysis and Spreadsheet Modeling would be a plus. Courses would be taught at the undergraduate and graduate levels and an 18 credit hour teaching load would be required.

Faculty will be available to meet with candidates at the Informs conference in Austin, and at the DSI meeting in San Diego. Individual arrangements will be made for those not attending the conferences. To ensure consideration, applications should be received by **November 5, 2010**, however the search will continue until the positions are filled. Interested applicants should send a cover letter, vita, evidence of strong teaching, and the names and addresses of three references to: F. Robert Jacobs (jacobs@indiana.edu), Chair of Faculty Search Committee, Department

of Operations & Decision Technologies, Kelley School of Business, Indiana University, Bloomington, IN 47405-1701

Indiana University is an Affirmative Action Equal Opportunity Employer committed to excellence through diversity. The University actively encourages applications from women, minorities, and persons with disabilities.

■ UNIVERSITY OF DETROIT MERCY

College of Business Administration Tenure Track Faculty Position in Decision Sciences

The College of Business Administration at the University of Detroit Mercy seeks a tenure-track Assistant Professor of Decision Sciences to begin in August of 2011. The position requires a doctorate from an AACSB-accredited program in Management Science or a closely related field, and an active research agenda. (Candidates who are ABD may apply, but are expected to complete all degree requirements within 6 months of the appointment). All fields of specialization are welcome; some preference will be given to Quantitative Methods and Operations Research. First year faculty teach a 2-2 load, conduct scholarly research for publication, and take an active role in curriculum development. The College places a major emphasis on excellence in teaching. Faculty should support the mission and identity of a Catholic institution operating in the Jesuit and Mercy traditions. The College of

Business Administration offers both undergraduate and graduate degrees, and has been continuously accredited by AACSB International since 1949.

The review process begins immediately and will continue until the positions are filled. Interviews will be conducted at the Decision Sciences Institute conference in San Diego, November 20-23. Please send a cover letter, cv, the names and contact information for three professional references, and evidence of teaching and research effectiveness (if available) to:

Dr. Gregory Ulferts
Chair of Decision Sciences Search
College of Business Administration
University of Detroit Mercy
4001 W. McNichols Road
Detroit MI 48221
gregory.ulferts@udmercy.edu

Letters of recommendation will be required before an offer is made.

Michigan's largest, most comprehensive private university, the University of Detroit Mercy is an independent Catholic institution of higher education sponsored by the Religious Sisters of Mercy and the Society of Jesus. The University seeks qualified candidates who will contribute to the University's mission, diversity, and academic excellence. The University of Detroit Mercy is an Equal Opportunity/Affirmative Action employer with a diverse faculty and student body, and welcomes persons of all backgrounds.

ROBINSON VISION STATEMENT, from page 5

accomplishing the long-term goals of the organization.

- DSI maintains a strong national organization and also supports regional societies. As President-Elect, I would welcome interacting with the Regional Activities Committee to ensure that the needs of the regions are integrated into all DSI activities and that potential synergies are fully developed.

- Actively promote and represent the DSI Brand Image to influential groups such as peers, college deans, department heads, and journal ranking organizations.
- Work to make the internal workings of the DSI Board and committees more transparent and open to the general membership.

Powell Robinson is Tenneco Professor of Business and Head, Information and Operations Management Department, Mays Business School, Texas A&M University.
[P-Robinson@mays.tamu.edu]

Publications

Decision Sciences Journal will publish two focused issues on "Managing Innovation in Supply Chains" (Focused Issue Co-Senior Editors: Barbara Flynn, Indiana University; Aleda Roth, Clemson University; and Xiande Zhao, Chinese University of Hong Kong) and "Social Computing, Operations, and Markets" (Focused Issue Co-Senior Editors: Ram Gopal, University of Connecticut; Prabhudev Konana, University of Texas at Austin). Please see page 31 in this publication for more information.

International Journal of Enterprise Information Systems is offering a special fast track review opportunity. All papers submitted before **November 30, 2010**, will be reviewed within 4 weeks of submission. Interested authors should consult the journal's manuscript submission guidelines at:

<http://www.igi-global.com/ijeis>

All inquiries and submissions should be sent to Editor-in-Chief, Madjid Tavana at tavana@lasalle.edu.

International Journal of Global Management Studies will be publishing a special issue on eLearning. Submission deadline is **December 15, 2010**, with final version due **January 15, 2011**. The Association of Global Management Studies is a multidisciplinary international association committed to the development of theoretical and practice knowledge pertaining to the global issues in all management related fields, and advances the dissemination of knowledge through its activities. For more information and author guidelines:

www.association-gms.org/Journals/Information_authors.html

All inquiries and submissions should be sent to Mukesh Srivastava, Editor-in-Chief, at editor@ijgms.org ■

Future DSI Annual Meetings

November 20-23, 2010

San Diego Marriott Hotel and Marina
San Diego, California

November 19-22, 2011

Boston Marriott Copley Place Hotel
Boston, Massachusetts

November 17-20, 2012

San Francisco Marriott
San Francisco, California

paid advertisement

THE UNIVERSITY OF MICHIGAN Department of Industrial and Operations Engineering Faculty Positions

The Department of Industrial and Operations Engineering at the University of Michigan invites applications and nominations for faculty positions beginning September, 2011.

We seek outstanding candidates for faculty positions in the areas of Quality Engineering, Human Factors and Ergonomics, at the assistant/associate professor level and Optimization at all levels. Applicants in research areas such as production systems, supply chain management, cognitive engineering, perceptual and cognitive systems modeling, applied probability, decision analysis, health care delivery systems, or financial engineering are encouraged to apply.

Candidates must have a Ph.D. and must demonstrate a strong commitment to high-quality research and evidence of teaching potential. Experience related to manufacturing and/or service operations is desirable. Candidates for Associate or Full Professor should have a commensurate record of research publications and are expected to provide organizational and research leadership, develop sources of external funding, build relationships with industry, and interact substantively with faculty colleagues.

Candidates should provide (i) a current C.V., (ii) a list of references, and one page summary statements describing: (iii) career teaching plans; and (iv) research plans. The



application review process will begin on November 15, 2010, but the positions will remain open and applications will continue to be reviewed until appointments are made.

We seek candidates who will provide inspiration and leadership in research and actively contribute to teaching. We are especially interested in candidates who can contribute, through their research, teaching and/or service, to the diversity and excellence of the academic community. The University of Michigan is responsive to the needs of dual career families.

Send inquiries and responses to:

E-mail: IOEFacultySearch@umich.edu

or mail to:

Faculty Search Committee c/o Gwendolyn J. Brown
Department of Industrial and Operations Engineering
University of Michigan
1205 Beal Avenue
Ann Arbor, MI 48109-2117

The University of Michigan is a non-discriminatory, affirmative action employer.

This list is obviously non-exhaustive and hence, we also welcome other research related to the theme of the focused issue. In line with the editorial policies of the *Decision Sciences Journal*, we welcome submissions which analyze the problem of interest using any appropriate methodological research tool(s) (analytical, conceptual, and/or empirical).

Review Process and Deadlines

Manuscripts for the focused issue should be submitted by carefully reviewing the

guidelines available at: <http://decision-sciencesjournal.org/authors.asp>. All authors submitting a manuscript should make a special note that it is for the focused issue.

The anticipated deadlines for this focused issue are:

- **January 31, 2011:** Submission deadline for initial submissions.
- **May 15, 2011:** First-round decisions on all submitted manuscripts.

- **July 31, 2011:** Submission deadline for invited revisions.
- **September 30, 2011:** Final decisions. ■

SOCIAL COMPUTING, from page 31

decisions. Some topics of interest include, but are not limited to the following:

1. Prediction markets in project management and forecasting.
 - a. How to engage participants to participate in prediction markets to make these markets relevant?
 - b. Incentive design for internal prediction markets to function efficiently.
2. The role of community sentiments in predicting markets.
3. The use of community sentiments in streamlining operations.
4. The use of search frequency in understanding markets (market share, product diffusion, stock price) and operations.
5. Challenges in the adoption of social computing mechanisms for operations.

6. Impact of IT on financial and operational risks.

Key problems in this domain can be investigated using any rigorous research paradigm including economic, analytical, empirical, experimental, and/or conceptual. In line with the editorial policies of the *Decision Sciences Journal*, we welcome submissions which analyze the problem of interest using any appropriate methodological research tool(s).

Review Process and Deadlines

Manuscripts for the focused issue should be submitted by carefully reviewing the guidelines available at: <http://decision-sciencesjournal.org/authors.asp>. All authors submitting a manuscript should make a special note that it is for the focused issue. The anticipated deadlines for this focused issue are:

- **June 15, 2011:** Submission deadline for initial submissions.
- **September 30, 2011:** First-round decisions on all submitted manuscripts.
- **January 15, 2012:** Submission deadline for invited revisions.
- **February 15, 2012:** Research workshop (details will be forthcoming).
- **April 30, 2012:** Final decisions. ■

BALLOTS, from page 1

The 2009-10 Nominating Committee, chaired by Norma J. Harrison, has completed the slate of nominees for the 2011 DSI election of officers. The Nominating Committees for the regional subdivisions are also compiling the names of nominees who are running this year for the office of vice presidents elected by the regional subdivisions.

Ballots will be e-mailed in January 2011. Additional nominations may be made by November 30, 2010. Each additional nomination must be made by petition signed by at least five percent of the members and submitted to the Institute's Secretary, c/o the Institute's home office, 75 Piedmont Avenue, Suite 340, Atlanta, GA 30303.

Additional nominations for vice presidents elected by the regional subdivisions may be made upon petition signed by at least five percent of the regional subdivisions' members.

Please be sure that the DSI Home Office (dsi@gsu.edu) has your current e-mail address! ■

DECISION SCIENCES INSTITUTE

2010 Annual Meeting Registration Form • San Diego, California • November 20-23, 2010

All attendees must register for the meeting. Conference registrations must be postmarked by October 19, 2010, to avoid a late fee of \$50. After November 1, requests for cancellation refunds will not be accepted. **Mail form and payment for registration to:** Decision Sciences Institute, 35 Broad Street, Suite 414, Atlanta, GA 30303, fax 404-413-7714.

Last Name																			
First Name & Middle Initial																			
First Name for Badge																			
Organization/Affiliation																			
Mailing Address (<input type="checkbox"/> New <input type="checkbox"/> Home <input type="checkbox"/> Business):																			
City, State, Zip and Country																			
Telephone (<input type="checkbox"/> Home <input type="checkbox"/> Business) Fax																			
Cell phone (to receive text message updates during the conference)																			
E-mail																			

We would appreciate your answers to the following questions, which will help us plan this and future meetings.

1. Where will you stay in San Diego?

- ☐ a. Conference hotel
☐ b. Other (please specify)

2. Type of accommodation:

- ☐ a. Single ☐ b. Double

3. Date of arrival:

- ☐ a. Fri. (11/19)
☐ b. Sat. (11/20)
☐ c. Sun. (11/21)
☐ d. Mon. (11/22)
☐ e. Tues. (11/23)

4. Do you plan to attend:

- ☐ a. Sunday's luncheon?
☐ b. Monday's reception?
☐ c. Tuesday's luncheon?
☐ d. All?
☐ e. None?

5. Interest Area (check one):

- ☐ a. Academic Administration
☐ b. Accounting
☐ c. Economics
☐ d. Finance
☐ e. Health Care Systems
☐ f. Innovative Education
☐ g. International Business
☐ h. Marketing
☐ i. Microcomputer Systems & Apps.
☐ j. IS/DSS
☐ k. Managerial Problem-Solving
☐ l. Organizational Behavior
☐ m. Organizational Theory
☐ n. Manufacturing/Service Management
☐ o. Public/Nonprofit Management
☐ p. Quantitative Techniques & Meth.
☐ q. Stats, Decisions & Fore.
☐ r. Strategic Management & Policy
☐ s. Technology and Innovation
☐ t. E-commerce
☐ u. Other
☐ z. None

6. What is your primary regional affiliation:

- ☐ a. Asia-Pacific Region
☐ b. European Region
☐ c. Indian Subcontinent Region
☐ d. Mexico Region
☐ e. Midwest Region
☐ f. Northeast Region
☐ g. Southeast Region
☐ h. Southwest Region
☐ i. Western Region
☐ j. At-Large
☐ k. None

7. What is your interest in Placement?

- ☐ a. As employer and employee
☐ b. Employee only
☐ c. Employer only
☐ d. None

8. What was the primary reason you decided to attend the annual meeting?

- ☐ a. Annual Meeting in general
☐ b. Job Placement
☐ c. Doctoral Student Consortium
☐ d. New Faculty Development Consortium
☐ e. Program Miniconferences
☐ f. Professional Devel. Program

9. ☐ Please check if you are a member of Alpha Iota Delta and would like to be identified as such at the Annual Meeting.

Member and non-member fees for all registration categories

include Sunday's luncheon, Monday's reception, Tuesday's award luncheon, and the CD-ROM Proceedings (see information below about the Proceedings).

The Annual Meeting Proceedings will be produced in CD-ROM format and is included in the conference registration fee for all registered attendees. If you **DO NOT** wish to receive the Proceedings, please indicate below. Additional CD-ROM Proceedings can be purchased at a cost of \$25 each, but must be ordered by **October 1, 2010** (see form below).

☐ **I DO NOT** wish to receive the Annual Meeting Proceedings.

Member registration	\$325.00	
2010-11 Member dues renewal (For the exact amount owed, please refer to the dues renewal notice previously mailed to you.)	160.00	
(Outside U.S. & Canada add \$5)	5.00	
Non-Member registration (<input type="checkbox"/> Please check if you desire membership benefits. This fee entitles you to one year of membership in the Institute.)	485.00	
(Outside U.S. & Canada add \$5)	5.00	
Student member registration	80.00	
2010-11 Student dues renewal (For the exact amount owed, please refer to the dues renewal notice previously mailed to you.)	25.00	
(Outside U.S. & Canada add \$5)	5.00	
Student Non-Member registration (<input type="checkbox"/> Please check if you desire membership benefits. This fee entitles you to one year of membership in the Institute.)	105.00	
(Outside U.S. & Canada add \$5)	5.00	
Emeritus Member registration	80.00	
(Outside U.S. & Canada add \$5)	5.00	
Emeritus Non-Member registration	115.00	
(Outside U.S. & Canada add \$5)	5.00	
Extra Sunday's luncheon(s) @ \$40.75 each		
Extra Tuesday's awards luncheon(s) @ \$40.75 each		
Extra CD-ROM Proceedings @ \$25.00 each		
After October 19, 2010 (LATE FEE)		
TOTAL		

CREDIT CARD INFORMATION: ☐ Visa ☐ MC ☐ American Express

☐ Discover

Total Amount \$ _____

Card No. _____ Expires: ____/____

Card Holder's Name _____
(Please Print)

Signature _____

Billing Address _____

City/State/Zip _____

OFFICERS' NOMINATIONS

The Institute's 2010-11 Nominating Committee invites your suggestions for nominees to be considered for the offices of President-Elect, Treasurer, and Vice Presidents elected at-large to serve on the Institute's Board of Directors, beginning in 2012.

Your recommendations should include the affiliation of each nominee, the office recommended for the nominee, and a brief statement of qualifications of the nominee. If you would like to recommend persons for the offices of regionally elected Vice Presidents from the Asia-Pacific, European, Mexico, Midwest, and Northeast regions, please indicate so on the form below. These names will be forwarded to the appropriate regional nominating committee chair.

Please send your recommendations by no later than October 1st to the Chair of the Nominating Committee, c/o the Decision Sciences Institute, Georgia State University, J. Mack Robinson College of Business, University Plaza, Atlanta, GA 30303. There are no exceptions to the October 1st deadline.

The Nominating Committee is most appreciative of your assistance.

Office _____

Nominee's Name & Affiliation _____

Statement of Qualifications _____

Nominator's Name & Affiliation _____

FELLOWS' NOMINATIONS

The designation of Fellow is awarded to active supporters of the Institute for outstanding contributions in the field of decision sciences. To be eligible, a candidate must have achieved distinction in at least two of the following categories: (1) research and scholarship, (2) teaching and/or administration (3) service to the Decision Sciences Institute. (See the current list of DSI Fellows on this page.)

In order for the nominee to be considered, the nominator must submit in electronic form a full vita of the nominee along with a letter of nomination which highlights the contributions made by the nominee in research, teaching and/or administration and service to the Institute. Nominations must highlight the nominee's contributions and provide appropriate supporting information which may not be contained in the vita. A candidate cannot be considered for two consecutive years.

This information should be sent by no later than October 1st to the Chair of the Fellows Committee, Decision Sciences Institute, Georgia State University, J. Mack Robinson College of Business, University Plaza, Atlanta, GA 30303. There are no exceptions to the October 1st deadline.

Decision Sciences Institute Fellows

Adam, Everett E., Jr., Univ. of Missouri-Columbia	Malhotra, Naresh K., Georgia Institute of Technology
Anderson, John C., Univ. of Minnesota	Markland, Robert E., Univ. of South Carolina
Benson, P. George, College of Charleston	McMillan, Claude,* Univ. of Colorado at Boulder
Beranek, William, Univ. of Georgia	Miller, Jeffrey G., Boston Univ.
Berry, William L., The Ohio State Univ.	Monroe, Kent B., Univ. of Illinois
Bonini, Charles P., Stanford Univ.	Moore, Laurence J., Virginia Polytechnic Institute and State Univ.
Brightman, Harvey J., Georgia State Univ.	Moskowitz, Herbert, Purdue Univ.
Buffa, Elwood S.*, Univ. of California-Los Angeles	Narasimhan, Ram, Michigan State Univ.
Cangelosi, Vincent*, Univ. of Southwest Louisiana	Neter, John, Univ. of Georgia
Carter, Phillip L., Arizona State Univ.	Nutt, Paul C., The Ohio State Univ.
Chase, Richard B., Univ. of Southern California	Olson, David L., Texas A&M Univ.
Chervany, Norman L., Univ. of Minnesota	Perkins, William C., Indiana Univ.
Clapper, James M., Aladdin TempRite	Peters, William S., Univ. of New Mexico
Collons, Rodger D., Drexel Univ.	Philippatos, George C., Univ. of Tennessee-Knoxville
Couger, J. Daniel*, Univ. of Colorado-Colorado Springs	Ragsdale, Cliff T., Virginia Polytechnic Institute and State Univ.
Cummings, Larry L.*, Univ. of Minnesota	Raiffa, Howard, Harvard Univ.
Darden, William R., Louisiana State Univ.	Rakes, Terry R., Virginia Polytechnic Institute and State Univ.
Davis, K. Roscoe, Univ. of Georgia	Reinmuth, James R., Univ. of Oregon
Davis, Mark M., Bentley College	Ritzman, Larry P., Boston College
Day, Ralph L., Indiana Univ.	Roth, Aleda V., Clemson Univ.
Digman, Lester A., Univ. of Nebraska-Lincoln	Sanders, Nada, Texas Christian Univ.
Dock, V. Thomas, Maui, Hawaii	Schkade, Lawrence L., Univ. of Texas at Arlington
Ebert, Ronald J., Univ. of Missouri-Columbia	Schniederjans, Marc J., Univ. of Nebraska-Lincoln
Edwards, Ward, Univ. of Southern California	Schriber, Thomas J., Univ. of Michigan
Evans, James R., Univ. of Cincinnati	Schroeder, Roger G., Univ. of Minnesota
Fetter, Robert B., Yale Univ.	Simone, Albert J., Rochester Institute of Technology
Flores, Benito E., Texas A&M Univ.	Slocum, John W., Jr., Southern Methodist Univ.
Flynn, Barbara B., Indiana Univ.	Sobel, Marion G., Southern Methodist Univ.
Franz, Lori S., Univ. of Missouri-Columbia	Sorensen, James E., Univ. of Denver
Glover, Fred W., Univ. of Colorado at Boulder	Sprague, Linda G., China Europe International Business School
Gonzalez, Richard F., Michigan State Univ.	Steinberg, Earle, Touche Ross & Company, Houston, TX
Grawoig, Dennis E., Boulder City, Nevada	Summers, George W., Univ. of Arizona
Green, Paul E., Univ. of Pennsylvania	Tang, Kwei, Purdue Univ.
Groff, Gene K., Georgia State Univ.	Taylor, Bernard W., III, Virginia Polytechnic Institute and State Univ.
Gupta, Jatinder N.D., Univ. of Alabama in Huntsville	Troutt, Marvin D., Kent State Univ.
Hahn, Chan K., Bowling Green State Univ.	Uhl, Kenneth P., Univ. of Illinois
Hamner, W. Clay, Duke Univ.	Vazsonyi, Andrew*, Univ. of San Francisco
Hayya, Jack C., The Pennsylvania State Univ.	Voss, Christopher A., London Business School
Heineke, Janelle, Boston Univ.	Wasserman, William, Syracuse Univ.
Hershauer, James C., Arizona State Univ.	Wemmerlöv, Urban, Univ. of Wisconsin-Madison
Holsapple, Clyde W., Univ. of Kentucky	Wheelwright, Steven C., Harvard Univ.
Horowitz, Ira, Univ. of Florida	Whitten, Betty J., Univ. of Georgia
Houck, Ernest C., Virginia Polytechnic Institute and State Univ.	Whybark, D. Clay, Univ. of North Carolina-Chapel Hill
Huber, George P., Univ. of Texas-Austin	Wicklund, Gary A., Capricorn Research
Jacobs, F. Robert, Indiana Univ.	Winkler, Robert L., Duke Univ.
Jones, Thomas W., Univ. of Arkansas-Fayetteville	Woolsey, Robert E. D., Colorado School of Mines
Kendall, Julie E., Rutgers Univ.	Wortman, Max S., Jr., Iowa State Univ.
Kendall, Kenneth E., Rutgers Univ.	Zmud, Robert W., Florida State Univ.
Keown, Arthur J., Virginia Polytechnic Institute and State Univ.	
Khumawala, Basheer M., Univ. of Houston	
Kim, Kee Young, Yonsei Univ.	
King, William R., Univ. of Pittsburgh	
Klein, Gary, Univ. of Colorado, Colorado Springs	
Koehler, Anne B., Miami Univ.	
Krajewski, Lee J., Notre Dame Univ.	
LaForge, Lawrence, Clemson Univ.	
Latta, Carol J., Georgia State Univ.	
Lee, Sang M., Univ. of Nebraska-Lincoln	
Luthans, Fred, Univ. of Nebraska-Lincoln	
Mabert, Vincent A., Indiana Univ.	
Malhotra, Manoj K., Univ. of South Carolina	

*deceased

CALENDAR

NOVEMBER

November 20-23

41st Annual Meeting of the Decision Sciences Institute, to be held at the San Diego Marriott Hotel and Marina in San Diego, California.

<http://www.decisionsciences.org/annualmeeting>

DECEMBER

December 1

Paper submissions and special session proposals due for **the Northeast Region's 2011 Annual Meeting**, to be held April 14-16, 2011, at the Montréal Marriott Château Champlain in Montréal, Canada.

<http://www.neds11.org/>

December 28

4th Annual Meeting of the Indian Subcontinent will be held at Management Development Institute, Gurgaon (Suburb of New Delhi), India, December 28-31, 2010. See page 32.

JANUARY

January 31

Decision Sciences Journal will publish two focused issues on "Managing Innovation in Supply Chains" (submission deadline is January 31) and "Social Computing, Operations, and Markets" (submission deadline is June 15). See page 31.

MARCH

March 13

Submission deadline for papers to the **Midwest Region 2011 Annual Meeting** (to be held May 12-14, 2011, in Indianapolis, Indianapolis). See page 32.

APRIL

April 1

Submission deadlines for Refereed Papers and Competitions to the **42nd DSI Annual Meeting** (to be held November 19-22, 2011, at the Boston Marriott Copley Place Hotel in Boston, Massachusetts). Submission deadlines for Abstracts and Proposals is May 1, 2011. See page 32.

For current news and activities, visit the DSI Web site at
<http://www.decisionsciences.org>

Decision Sciences Institute Application for Membership



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(You have been designated to receive all publications and special announcements of the Institute.)

Please send your payment (in U.S. dollars) and application to:
Decision Sciences Institute, Georgia State University, J. Mack Robinson College of Business, University Plaza, Atlanta, GA 30303. For more information, call 404-413-7710 or email dsi@gsu.edu.

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